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MIND

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A QUARTERLY REVIEW

OF

PSYCHOLOGY AND PHILOSOPHY.

EDITED BY

PROF. G. E. MOORE,

WITH THE CO-OPERATION OF F. C. BARTLETT, M.A., AND C. D. BROAD, LITT.D.

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I.—CONCERNING RIGHT.

BY J. LAIRD.

I.

WHETHER "right" is or is not indefinable I shall not attempt to determine. I think we should be chary of indefinables, although, no doubt, there are many terms which are reasonably believed to defy analysis. In such cases, however, it is frequently possible to discover some term or set of terms equivalent to the "indefinable" in question, in the sense that the equivalent term defines the same extension as the stubborn "indefinable," and I wish to maintain that there is this equivalence between a certain species of "right," *viz.*, what a man ought to do, and the best thing the man in question *can* do. I do not see how it can be disputed, except verbally, that it is alway right for a man to do what he ought to do and it seems to me a mistake (and seldom a plausible mistake) to hold that a man ought to do anything which is not the best thing he can do, or anything not so good as the best that, in his case, is practicable. *al*

I am saying this in the full knowledge that certain authors (whose judgment I greatly respect) believe, and even profess to *know*, that the goodness of an action has nothing to do with its rightness. Propositions about goodness, they say, may prove an action to be fine, commendable or excellent but have no bearing at all upon the action's rightness or wrongness. Indeed, they go so far as to say that the *moral* excellence of an action is irrelevant to its rightness, and even (supposing this to be a further point) that any good the agent

may intend to achieve is similiary irrelevant. These assertions seem to me to be patently ill-grounded; and I wish to maintain, quite on the contrary, that good is always relevant to, and always required in, any true judgment concerning anybody's duty. Duty in my view (*vide* section VIII of this article) is only a species of right and not the whole of it. I am arguing, however, about this particular species of right.

I agree, however, that all these phrases require careful definition, and that some of them may readily be transformed into something that is neither evident nor true. For example, it does not seem to me evident or necessarily true, that the best thing a man *can* do is always to do what will probably have the best consequences.

Again, a puzzling point arises in connexion with what we call a man's "duty". It is commonly held, and indeed may seem evident, that a man's duty and what he ought to do are absolutely identical. Indeed, I propose to adopt this view for the purposes of the ensuing discussion. As we shall see, however, there is an inevitable, and sometimes a crucial, distinction between the ideal practicable act and the ideal voluntary act. If the latter, not the former, were what is meant by "duty" it would follow that a man's duty is not always the ideal practicable act for him, *i.e.*, not always the best that *he* can do.

II.

There is a verbal point concerning "duty" which needs some attention. It is held in some quarters that a man's duty may frequently be notably *less* than the best he can do. In certain other quarters (although the point, in this case, is more doubtful) it appears to be maintained that a man's duty is always too high for him, and something *more* than the best he can do.

The first of these opinions results from defining duty as something obligatory upon all, or at any rate upon all who are neither immature nor defective. If so, the question is what *everyone* ought to do, and if it be granted that no one can do what is impossible *for him* to do, it follows that duty, on this definition, applies only to actions that are in everyone's power. Such duties, we may concede, exist. It is in everyone's power, unless the man is mad, to refrain from murder or conscious incest, or to exercise care and foresight unless the emergency calls for absolutely instantaneous response. On the other hand, since men's capacities differ, it is possible for some to do better than the minimum that is obligatory for all,

not indeed in every variety of moral practice, but in some of its varieties. Abstention from murder or incest, being simply abstention from murder or incest, does not show this kind of difference. The duty, if performed at all, is performed completely and perfectly. It is otherwise, say, with the duty of self-culture or of diminishing human suffering or of sympathetic understanding of one's fellows. Some have greater opportunities and greater skill for promoting public welfare than others have. And it is not merely luck or technical ability that is in question. For sympathetic understanding of our fellow creatures is a virtue, and different people differ very signally in their capacity for exercising the virtue.

Proceeding upon these lines we might distinguish, perhaps, between *deontics* and *aretaics*, meaning by the former that which, either perfectly or in a definite degree, is obligatory upon all, irrespective of men's special capacities, and by *aretaics* the pursuit of excellence on the part of each several man according to his several powers. If so, *aretaics* for many people (possibly for everyone in special ways), would be something more than *deontics*, and although *deontics*, thus interpreted, tends to sink to the sterile level of what is technically called *tutiorism* ("When in doubt, obey the law") and of reputable or of disreputably reputable Pharisaism ("I fast twice in the week; I give tithes of all that I possess") it might be freed, I think, from the reproaches rather easily, although often justly, brought against this order of opinion.

I cannot think, however, that there can be any ultimate, or genuinely important distinction of this kind. It cannot be maintained that where *aretaics* differs from *deontics*, *aretaics* does not express what ought to be done. If a man has special gifts *he* ought to employ them. From him, much is *required*. The very principle which forbids us to require more than a certain feasible standard from everyone indiscriminately also enjoins us to require more when we discriminate the relevant special capacities of particular people. And I think it is a mistake to distinguish between any man's duty and what *he* ought to do.

In short, the point is only verbal.

The other and opposite opinion, that a man's duty is always an unattainable ideal which nobody can achieve to perfection cannot, I think, be seriously meant. For how can it be true that a man ought to do what he cannot conceivably do? What can be legitimately argued, I think, (I do not say correctly argued) is only the very different proposition that we seldom do quite, or nearly, the best we could conceivably do.

Even on this interpretation the proposition seems doubtful in many cases. If a man pays his debts "on the nail," I think he has done, quite perfectly, what he ought to have done. In most cases, at any rate, the spirit in which he makes the payment seems irrelevant, and I cannot see what else interferes with the perfection of the action. Abstention from murder is perhaps more doubtful. It is certainly better not to harbour murderous thoughts, or any thought of injury, or anything except charity for one's neighbour. In other words, the spirit of the abstention *may* be relevant. On the other hand, these revengeful thoughts and these empty, carefully hidden, menaces are very different indeed from murder—and make a very great difference to the person who is *not* murdered. Again, it is not to be expected that anyone could bring every action to the pitch of relative perfection that would be possible if he specialised in that department; and there are difficulties arising from the distinction between doing as well as possible *now*, and doing as well as would have been possible, if, as we might, we had formed better habits in the past. In a word, the whole subject is complicated, having no single obvious solution. In the main, however, what we have to note is that a man's duty is always the best that he can do, whether or not the "best" is very difficult and very high.

III.

The phrase "the best he can do," however, also requires explanation. Indeed, the explanation would take a volume, and the volume would be lucky, if, in the end, it had made so much as a promising start in this affair. I cannot therefore attempt to discuss all or nearly all that is relevant, but it may be possible to mention certain relevant matters within manageable compass.

In the first place, the phrase implies that the agent has certain alternatives in the way of action, and the existence of such alternatives, I suppose, is denied by certain types of deterministic theory. If there is only *one* thing anyone can do at any given time, there is not much point in speaking literally of the best or of the worst he could do. We should either have to speak of the various things which, *as it seems*, he could do, or to compare the possibilities of action in the case of hypothetical people similar to the agent in such relevant respects as we can discern, but not precisely identical with him. While it might be important to speak in this way or to make such comparisons, the terms of the discussion

would certainly be apt to mislead. But I cannot discuss the question here, and ask to be allowed to speak as if we all had, in most cases at least, different alternatives open to us in the way of action.

In the second place something like the commensurability of all values is implied—although not necessarily their numerical commensurability. This, together with the further implication of a single standard for all values, is, as I am very well aware, a difficult question which, as yet, has been very imperfectly discussed. And I cannot discuss it now. I have therefore to ask, once again, to be allowed to speak as if, among alternative actions, some one must be held to be better than any other, unless, of course some of the better ones were precisely equal in value, or all were of neutral or of no value.

On these assumptions, we should say that there is an ideal practicable course for any given agent at any given time. This ideal practicable course is the agent's duty, or what is right for him to do, at the time in question. It is simply the agent's optimum alternative in the way of action—that which is the best when everything relevant is taken into account. This is the agent's duty as God knows it. The trouble is that God only knows it. No human agent can know it fully—at any rate in all cases. For, to mention no other matter, no one knows his own capacities fully, and no one knows the turn that events initiated by his action may take in the remote future or, quite certainly, in a future not remote at all.

If we knew that certain classes of actions were always right, we should, of course, know our duty in these cases as well as God knows it, and I do not wish to deny that we may know our duty quite certainly in some particular cases. The point concerning general rules is more dubious, but perhaps we do know that it can never be right, say, to commit adultery, even if the purpose of the adultery were Delilah's, and if the religion of the Philistines were the true religion. It is difficult, however, to hold such views and also to accept the commensurability of all values. According to the latter view, *some* advantages would outweigh any conceivable crime, provided that the counterbalancing advantages were great enough. We should, therefore, have to know (if we *knew* that anything was quite certainly wrong) that the maximum counterbalancing advantage in the actual world could not exceed the evil of the given crime. And it is hard to see how such a belief could be founded on more than conjecture.

In any case, many of our duties (meaning by duty any man's ideal practicable course), cannot be *certainly* known by

any human agent, although we may have very reasonable suspicions concerning most of our duties.

In particular we have to distinguish between the ideal practicable course (in the sense defined above), and what I propose to call "the ideal voluntary course,"¹ meaning thereby the best alternative that an agent could select at any given time so far as his choice is guided by his knowledge and belief.

Clearly, there is a very great difficulty here. It is not true that what any man can do is just what he believes he can do, or again that the results he achieves are always results he could conceivably have foreseen. On the other hand, beliefs concerning such matters are included in his capacities, and are probably the most effective part of his active constitution. Consequently, while the ideal practicable course is not identical with the ideal voluntary course it is also not independent of the ideal voluntary course—indeed, it is very far from being independent.

Mr. Carritt, who, in his recent *Theory of Morals*, is profoundly conscious of this difficulty (e.g., p. 140) complains that most ethical systems fail conspicuously to solve, or even to palliate, it. Personally, I think, it is asking too much of moralists to do more than state the circumstance clearly; and I do not think the point has been neglected. I should like to observe, however, that the aporia cannot be dissolved in the way with which (as I gather) Mr. Carritt himself has a certain sympathy. The argument I have in mind is that what a man "can do" is what is "within his power," that his "power" is his "will" or what he voluntarily *controls*, and that anything that happens to him or to his deeds but is not strictly controlled by his will, is not a thing that *he* does or within *his* power. This opinion seems to me wholly mistaken. We all do much that is not strictly voluntary, or, in other words, either we are more than our faculty of willing, or willing is wider far than express intentional choice, directed by conscious knowledge and belief. Much that, in terms of this argument, is not regarded as within our voluntary control, such as purity of heart and sympathy with our fellows, does affect the value and (I should say) the rightness of con-

¹ By "voluntary" I mean actually and consciously willed. If the word "voluntary" were interpreted in a wider sense (e.g., the sense appropriate to "voluntary control" or "anything a man *might* do or forbear doing if he so willed *supposing that he could so will*") the line which I am attempting to draw in this discussion would have to be drawn at a different place. For these two definitions of "voluntary" do not define the same thing. According to both definitions, however, the line in question would have to be drawn.

duct. Many results also, like the peace of the righteous which is given not sought, are similarly relevant. In short, the "good will" in the sense here intended is not the whole of our active capacity.

It would be pleasant, to be sure, if we could confine our attention entirely to the ideal voluntary act and neglect the ideal practicable act, because the analysis of the former, uncomplicated by the analysis of the latter, is comparatively speaking manageable as well as important; and I mean to proceed with the more manageable task in the bulk of the discussion that follows. What I am saying now is only that the more manageable task is not the whole of the moralist's business.

I should like, however, to make one further explanation concerning the ideal practicable act.

Mr. Carritt, being engaged, so far as I can see, with the essential distinction I have been trying to draw, separates what he calls the absolute rightness of an action from "the act right for me". He explains that he means by the latter "the act, if the circumstances are what I think" (p. 93). And, therefore, no doubt, he has conveyed his meaning. Nevertheless, I think he might have conveyed it better. The ideal practicable act for any given agent at any given time is what is right *for him*, and it is relative to the capacities of the agent at that time. Although relative to the agent (who is of course a subject or ego), however, it is objective, not subjective, in the most important sense of this troublesome contrast. The agent's capacities, although neither we nor the agent himself can have complete knowledge of them, are in fact wholly determinate, and therefore quite as objective as anything under the sun. These capacities, no doubt, include the efficacy of the agent's ideas and beliefs; but his ideas and beliefs are actual facts which have definite actual potencies.

IV.

Our conclusion, up to the present, has been that the ideal practicable act for any given agent at any given time is that agent's duty at the time in question—the word "time," of course, being taken to indicate more broadly all the circumstances with which the agent is concerned at the "time". This ideal practicable act must be distinguished from the ideal voluntary act, although the two (as we have seen) are very far from being independent.

On the whole, this seems to me the correct opinion, although many would hold that duty or right action should be defined

by the ideal voluntary act, and therefore would maintain that a right act might be better if it were conjoined with some non-voluntary excellence, or even that it might be morally better supposing that certain non-voluntary excellences were themselves moral.

On any theory, however, our voluntary capacities are a great part of our relevant moral capacities—so much so, indeed, that it is generally agreed that we should not be moral beings *at all* unless many of our actions were controlled voluntarily in a species of volition pretty highly developed in point of intelligence, of resolution, and of certain other elements. We must therefore proceed to this important department of the subject.

Conformably with what has hitherto been argued, the obvious problem that calls for attention is the analysis of the ideal voluntary act for any given agent at any given time. I think, however, that in the end we may simplify our procedure if we begin by asking a different question. This is the analysis of the ideal action of an ideal agent at any given time.

More precisely, I mean by an ideal agent, for the purposes of this discussion, a human agent who is neither angel nor superman but at the same time is not sub-human. I want to consider the optimum capacity of human volition in this matter, or in other words to avoid, initially, the complications that arise from avoidable human ignorance, pernicious habits not universal in the species, the lack of courage which some weak men, but not all men, show, and the like. On the other hand, I am not going to suppose that this "ideal" human agent is confronted with ideal circumstances, but on the contrary that he has to deal with a situation alterable and usually capable of improvement, but in many ways irritating, obscure, and in some part evil.

A voluntary act, on the part of such an agent, is his adjustment towards an alterable situation, guided by such knowledge of, and foresight concerning, the alterable situation as the agent may possess. The agent may either refrain from meddling with the situation, or he may interfere in such a way as to prevent the situation from changing, or he may alter the situation and make it different. Only certain situations, not all, can be altered in this way, and the alterations initiated by the ideal agent are justified by the values which are sought in his choice. It is his business to make the situation better if he can.

All such action is forward-looking, or an adjustment towards the future. If the time of the choice is the present,

the action chosen succeeds the choice, either continuously (as we should say, in the "waxing" part of the same specious present), or proximately at the next succeeding moment, or remotely in the case of resolutions not immediately to be executed. A more intricate case (although it is not dissimilar in principle) is the resolution to initiate a process that *must* be gradual, let us say the formation of a desirable habit.

In other words, all choice is the choice of certain future consequences whether or not the consequences are immediate continuations of the choice. It follows that all voluntary actions, even of ideal human agents, can be guided only by such knowledge and foresight as is appropriate to the future. To our knowledge, the future is never wholly certain, but only probable in various degrees. Probability, therefore, is the guide of choice; and the rightness of voluntary action is to be determined, not by actual success, but by the reasonable prospect of success.

Probability is entirely objective (I do not say arithmetically measurable) but it is relative to the data on which it is based. Another way of putting what has just been said would be to assert that even an ideal human agent could not have such data concerning the future as would conclusively prove the certainty of any particular consequence or set of consequences.

Are we to say, then, that the rightness of voluntary action is determined simply by the objectively probable consequences relative to such data as the agent (in this case, the ideal human agent) happens to possess?

Obviously not. It is the comparative value of the different sets of probable consequences that is in question. We are assuming a good deal if we suppose that our ideal human agent has an exact (not merely an approximate) knowledge of the values of this or the other thinkable consequence. Since he is an ideal human agent, however, let us suppose that he has this certainty concerning what the values would be if certain consequences occurred. In that case, keeping to probable consequences, he would have to choose, perhaps, between a great but unlikely value, and a lesser but more likely value. In other words his computation would have to be a function of value and probability conjointly.

And this is not the whole, or even the most significant part, of the problem. This conjunction of probability with value would be relative to any data which the voluntary agent happened to possess. Plainly, however, the most important question of all is the adequacy of the agent's data to his circumstances. In the normal case, this also is appreciably within the agent's control. It is our business, as even tolerably

effective agents, to obtain as much relevant information as we can about any course of conduct we may have to consider seriously. If we could assume that the ideal human agent has the maximum relevant information concerning the circumstances of his action that any human being could have at the time of the action, we should, of course, have allowed for, and included, this third requisite. But we should have to note that it is a requisite.

Regarding consequences, therefore, we have to say that three principal considerations enter. These are (1) the probability of consequences relative to certain data, (2) the value of the probable alternatives, and (3) the adequacy of the data according to which the probable consequences are reckoned, so far as such adequacy can be affected by volition.

V.

If the voluntary acts of an ideal human agent were to be appraised solely in respect of their consequential values (so far as these may be determined by volition) we should now, I think, have completed, in outline at least, our analysis of the best that could be done voluntarily by an ideal human agent. It is not true in fact, however, that future consequences comprise the whole of this problem.

In addition to the future, we have to take account of the present and of the past. Let us, then, begin with the past.

An obvious instance is promise-keeping. To be sure, it is not always right to keep a promise, *e.g.*, if we have promised to elope with another man's wife, or to assassinate Mr. Cook. Supposing the promise not to be sinful, however, and also supposing that the condition of affairs has not altered so radically in the interim as to make the original promise depend on a complete mistake, it is our duty to implement our promises so far as we may. More generally, and without any specific promise, there may be legitimate expectations from our past conduct which, in a similar way, ought to constrain or at least to affect our action.

This is a clear proof that the past ought to affect, and ought sometimes to determine, present volition. It is a further question, however, how far this consideration is relevant to our previous analysis.

It is sometimes argued that the rightness, say, of justice or of promise-keeping is itself determined by their valuable consequences. Credits, contracts and promises, it is said, are justified because they are instruments of social stability and security; and similarly of justice.

It is true, I think, that these consequences are relevant in such instances, and it is nonsensical to neglect this circumstance. When it is argued, for instance, as by Mr. Ross¹ and Mr. Carritt,² that because we might, in some given instance, do more good by making a donation to a hospital than by paying our debts, therefore the course which has the best consequences need not be the *right* course, I think there is a serious omission in the argument. The particular instance, of course, is unfortunate, because money that we owe is not ours. Therefore, the donation in question would be given with somebody else's money. Apart from this oversight, however, it would surely be legitimate to argue that although in some particular case, a man who forged a cheque might make a better use of the money than the money's proper owner, still forgery is so shrewd a blow at the stability of the (useful) banking system that the particular destination of the money is, comparatively, of little or no account. And this argument is stated wholly in terms of consequences.

On the other hand, I do not think it could be true that there is *no* value in justice *as such* or in promise-keeping *as such*, or that these have to be justified wholly in terms of some extraneous value (say, comfort or happiness). On the contrary, the disvalue of an outrage upon justice is largely due to the value of justice itself.

Pursuing this line of thought, we have to say, I think, that it carries us in principle to something non-temporal, although it is also applicable to events in time. It so happens, in the case of promises, that the past imposes a present obligation. More generally, however, we see in justice or equity a system of moral relations which must be distinguished, indeed, from mere formal consistency, but is, nevertheless, a rational moral order. Moral facts cannot legitimately be treated separately without regard to such general moral relations. They *have* that sort of moral context, and cannot without error be wrenched out of it. A great deal in the investigation of what we call right consists in the analysis of such general relationships, and is, we might say, a specific kind of moral logic. What should not be maintained, however, I think, is that such relationships do not possess *value*; or, again, that the *whole* of what we mean by right is exhausted in the formal structure of this moral logic.

This explanation is not really troubled by a minor difficulty. It may be said that mere consistency is not an important moral requirement, and that the kind of inconsistency which

¹ *I.J. of Ethics*, Jan. 1927, p. 126.

² *The Theory of Morals*, p. 72.

is called "turning over a new leaf" may be highly commendable. This may very well be true, but we are arguing now, not about *any* kind of consistency, but about the kind of consistency implied in justice, promise-keeping and the like. *This* species of consistency *ought* to be sustained, and the "new leaf" is a snare and an imposture if it contains no traces of former or of universal obligations.

In the second place it may be maintained, with much greater plausibility, that nothing in these contentions properly affects the fact that voluntary action can affect the future only. What has been shown, it may be said, is only that the future is connected with the past and with certain general relations. Among the consequences of any action, therefore, we have to reckon the conformity of the consequences to past obligations, and for that matter to non-temporal ethical relationships. The past, however, is fixed and quite unalterable by present volition. Therefore, while we should take account of it, we cannot in any way alter or modify it. We do not, in our volitions, have to deal with an absolutely fresh beginning, but with consequences already, in part, morally determined. Subject to this proviso, however, the ideal volitional agent has to act solely with regard to consequences.

I am inclined to doubt the validity of this very plausible objection, because I think that although the past is fixed, the values to which it contributes need not be fixed. Suppose a certain value attaches to a completed temporal series, and suppose that part of this series has elapsed. We can only affect the rest of the series voluntarily, but in affecting this part of the series we seem to me to be affecting the value of the whole. Thus, in my view, we may voluntarily affect the value of a *whole*, part of which is already past. I do not think it is true in fact that we affect only the values of the future *part* of the series.

After the past, the present. Are there any features of a *present* volition which have to be considered in this matter?

It is generally agreed (although not quite universally), that the moral worth of any action is affected by the motive with which the action is done. At the conscious level, "motive" in this sense, means the emotions and conscious appetencies relevant to the volition which are felt at the time of the volition. More obscure motives, however, may also influence us, and this is true whatever we may think of modern explanations of the "sub-" or "un-" conscious. Such motives are not, of course, independent of contemplated future consequences. On the contrary, they usually express the way in which we are attracted or repelled wittingly or unwittingly by

the thought of this or the other future consequence or of some aspect of it.

Since, for the time being, we are still officially concerned with the volitions of an ideal agent, we should, I suppose, allow his motives to be saintly and defer the consideration of this point, in the main, until we come to deal with an agent who is not ideal. Even in the case of an ideal agent however, we have to consider how far such motives are voluntarily to be controlled.

I think we should hold that there is a certain control over such motives at the time of volition. We can, during deliberation, ask ourselves whether there is malice in our present feeling or not, and can try to counteract the same. And without consciously having any strong or noticeable feelings, we may suspect, and endeavour to supplant, what we suspect to be unworthy impulses. More indirectly we can train ourselves gradually in such matters; and we all, I suppose, attempt to do so.

I think, therefore, that the motives contemporary with the process of volition are to some extent under our voluntary control. Such control, in consequence, is not entirely restricted to the future; and the quality of our motives is plainly relevant to the value and to the rightness of our actions.

VI.

We may now discard the fiction of the ideal human agent and his voluntary actions, that is to say we may cease to concern ourselves with the volitions of this prince among men who is always "one of the best" and never makes a mistake that is avoidable by human faculty. Instead we have to do with something which, however intricate, is not fabulous, *viz.*, the best or ideal voluntary action of this or the other particular man at some particular time.

A voluntary action, in this sense, does not mean an action which happens to have been initiated by a volition, but any action and train of consequences so far as these are properly due to the volition. The question is what the agent, having a limited control over his personal, social and other environment, can effect voluntarily and with foresight.

This being understood, the ideal voluntary action for any given agent at any given time varies with the capacity of the will of the agent at the time. If A's voluntary capacities differ relevantly from B's voluntary capacities, the ideal course for A's volition will not be the ideal course for B's volition. A ought to make up his mind to do what B should not make up his mind to do.

In a certain sense, therefore (as we have seen), the ideal voluntary action for some particular person at some particular time is subjective, because it varies with the voluntary capacities of the subject A or of the subject B. We have also seen, however, that this sense of subjectivity does not deny objectivity, since the subjective capacities in question are determinate facts, and since all functions of them are similarly determinate. Since the subject's capacities, however, in the way of voluntary action, include and are largely constituted by the subject's ideas and beliefs, we are threatened with another sort of subjectivity, *viz.*, with that which depends entirely upon individual opinion. So long, it is true, as such opinions are regarded simply as determinate forces in the world of fact there is no real occasion to modify the explanations given above. But it is necessary to walk delicately. For example, if the "subject" in question is invincibly muddle-headed or constitutionally irresolute, the best that *he* can do will, sometimes at least, be mistaken and irresolute.

What has principally to be avoided is the confusion contained in the phrase "subjectively right." Nothing that is right can be subjectively so, although any right volition is a function of the capacity of the will of the agent who exercises the volition. If the volition is right, it must be such that any one who knows the facts and correctly discerns their bearing must see that the volition *was* right. The rightness cannot depend upon what this or the other observer happens to opine *about the rightness*; and it is no matter, in principle, if the observer chances to be the agent who has the volition.

The phrase "subjectively right" may mean either of two very different things. Firstly, it may mean what is right for a given agent who is a subject or ego. This is an objective fact concerning the ego in question (or, in the narrower case, concerning his volition). Secondly, it may mean what some ego thinks is right. This is objective (unless when we are speaking simply as descriptive psychologists) only when the ego in question thinks correctly. Nothing, I think, could really be plainer than this distinction. For example, the agent's opinions concerning what is right and wrong need not be restricted to his own case although what is right for him to do must be so restricted. He may quite easily entertain feeble or mistaken notions concerning what is right *for other people*. If the present paper is feeble and mistaken, it would supply a perfect example.

Obviously, the most difficult and the most perplexing case is that in which an agent does what he believes he ought to do although other people think his ideas quixotic, mistaken,

absurd, or even outrageously mischievous. This perplexing case of the conscientious objector is so important that even Sidgwick appeared to think that it was the only case that called for special enquiry. "It is therefore worth while to point out," Sidgwick said, "that it can have only a limited and subordinate practical application. For no one, in considering what he ought himself to do in any particular case, can distinguish what he believes to be right from what really is so; the necessity for a practical choice between 'subjective' and 'objective' rightness can only present itself in respect of the conduct of another person whom it is in our power to influence."¹ And Sidgwick went on to argue that "unless the evil of the act prompted by a mistaken sense of duty appeared to be very grave,"² it is always wrong to induce some other man to act against his conscience, even when the other's conscience is bigoted, narrow, fanatical and ill-informed.

As it seems to me, a great deal is omitted in these contentions of Sidgwick's. In the first place, I do not think it could be seriously maintained that a man's action is always "subjectively right" if, in any given case, he does what he happens to think right at the moment. We all know, in our own case, that it is fatally easy to act on careless estimates concerning the probability of consequences, or on perfunctory analysis of their probable value, or without making any serious effort to grasp all the relevant moral features of the situation confronting us. It is in the power of all of us appreciably to improve the quality of our volitions in these essential particulars—at any rate in most cases.

In other words, the serious problem which Sidgwick is here considering arises, not simply when a man acts according to his *de facto* beliefs, but when he acts according to *the best of his belief, i.e.*, when we have reason to suppose that he has examined what he takes to be his duty as scrupulously and candidly as it is reasonable to expect of him, and has come to a serious decision.

In that case, much has to be considered. First there is the dubious but not inconsiderable principle of moral democracy, the assumption, that is, that in matters of conduct, where there is no question of peculiar aptitude or technical skill, it is to be assumed that there is no very great difference between particular men, but that each man is capable of making an intelligent moral decision. (We seldom apply this principle when we are dealing with children or with races of a colour different from our own.) Secondly, there is the principle that

¹ *The Methods of Ethics*, p. 209.

² *Ibid.*, p. 210.

it is better, so far, for a man to have come to a serious decision upon such matters than never to have examined them at all. (If the man's conscientious action is difficult and unpopular we should esteem him, again in so far forth, for adhering to it.) Thirdly, we may suspect, very often, that it is not our business, even argumentatively, to meddle with other people's convictions. Fourthly, there is the possibility that if a man's serious moral convictions are shattered on any one point, it may not be easy for him to retain any moral convictions at all.

For these and other such reasons we think it imprudent, at the least, to interfere in matters of conscience where the consequences of what we take to be mistaken views are not urgently mischievous, and when the mischief does not seem very great (e.g., a small proportion of conscientious objectors to conscription or to vaccination) we are prepared to make official reservations. Otherwise I do not think we hesitate to reason with the people we think mistaken, to prevent them from doing the mischief which we believe they are contemplating (from whatever motive), although we may hesitate to suborn them in any venal way. I doubt even (although the point is perhaps irrelevant) whether we usually care as much as we should whether opinions we consider dangerous or disgusting are really conscientious or not.

In the end, however, it has to be conceded that when a man acts according to the *best* of his *considered* lights, he is *thoroughly* commendable from the standpoint of *voluntary* ethics. This would be true if his lights were demonstrably dark ones (supposing, that is, that the demonstration is flatly beyond his capacity to comprehend). And, on any theory, the best that a man can do *voluntarily*, is very important indeed in any ethical theory.

If volition were the sole relevant circumstance in the rightness of conduct I think we should have to maintain that an act as good or as conscientious as was voluntarily possible for any given man *was* completely right. The problem is simply ignored by those who like Kant or Rousseau in their various ways maintain that an erring conscience is a chimera. In fact, however, we do not believe anything of the sort. On the contrary we believe that what a man *thinks* right, either for him or for anyone else, may very well *be* wrong, and in certain cases may be shown to be so. In other words, we do distinguish between the ideal practicable course, for any man, and the ideal course in terms of his faulty volition and the beliefs that go along with the volition. And if, frequently, we do not *know* the ideal practicable course, we may know

very well that some of our conjectures concerning it are much more likely to be adequate than others are, as also that certain conjectures are demonstrably foolish and absurd.

VII.

As has been mentioned at an earlier stage of this discussion, certain points in connexion with the relation between motive or intention and right action remain to be considered. It will be convenient to begin this investigation with reference to the utilitarian position sufficiently indicated by Mill when he said "The motive has nothing to do with the morality of the action, though much with the worth of the agent. He who saves a fellow creature from drowning does what is morally right, whether his motive be duty, or the hope of being paid for his trouble."¹

Mill's statement here is essentially the assertion that the felicific consequences of any act are precisely what they are and do not depend upon the feelings or intentions of the agent; and we may assume, without considering minor possible qualifications, that this assertion is true, not for felicific consequences only, but for all valuable consequences.

On the other hand, an action could not be right or moral *at all* unless it were the action of a moral agent; and although the morality of the agent (as we have seen) is not wholly identical with the morality of what are strictly his volitions, the possibility at least of volition *is* essential to the existence of a moral act. Speaking broadly, therefore, we have to deal with actions chosen and intended (*i.e.*, voluntary actions) although we may have to consider more than their volitional nature. Certainly, if by "motive" we meant *only* the emotions that impel (or are supposed to impel) our action at any given time, it may happen that *such* "motives" are irrelevant to *some* actions. (I have already instanced the mood in which we may pay our income-tax.) By "motive" in this passage, however, Mill plainly includes "intention" (*i.e.*, whatever we mean to do as well as the emotions that stir us), and in this sense of "motive" it is plain both that "motives" are essential to any witting and voluntary right action, and that the motive *defines* these actions.

This being remembered, Mill's statement is manifestly fallacious. To rescue a drowning man with the sole object of preserving his life, and to rescue him with the object of reward accruing, are obviously *different* volitions (and, therefore,

¹ *Utilitarianism*, chap. ii.

different moral actions), containing a *common* constituent, *viz.*, the rescue of the man.

Mill himself might have perceived the point had he altered his illustration slightly. Suppose that the victim of a blackmailer attempts suicide by drowning, and that the blackmailer rescues his victim with the object of continuing his source of supply. Would Mill *then* have contended that the blackmailer acts rightly in precisely the same sense as a bystander who rescued the would-be suicide without knowing anything of the circumstances?

It may be argued, no doubt, that sometimes it is reasonable for an agent to confine his attention to one definite consequence, and not to trouble about any others. The bystander, in the above illustration, need not consider whether the drowning person would be better dead, or had good reason for attempting suicide. *His* responsibility ceases when he has done his best to affect the rescue. When the ambulance comes, the rescuer, if he is a modest man, ought to fade out of the picture.

Such limitation of responsibility is an important practical matter, and I do not suggest that the ethical justification of it is other than intricate. For our present purposes, however, it is sufficient to note that, *unless for special reasons*, the scope of a volition cannot be restricted to *one* probable consequence, irrespective of the implied further consequences of that particular event. I doubt whether the blackmailer in our melodramatic illustration is entitled to *any* credit on the ground that, so far as the rescue went, he had acted like an honourable man.

Certain questions of genuine difficulty, however, emerge from this matter; and I shall note some of them.

(1) In the above illustration we have contrasted the voluntary rescue *vr*, with the voluntary rescue in the hope of gain *vrg* and with the voluntary rescue in the hope of sinful gain or blackmail *vr_b*. The first we should call noble (assuming that the matter should end there), the second legitimate (perhaps) but not noble, the third base and vile. In the second case, however (improbably, as we saw, in the third), it is possible that we might have a mixed action (say, *vr* + *vrg*) in which the agent really tried to do the right thing for its own sake, and would have done it apart from ulterior gain, but was not insensible to the hope of having his pockets filled after he had soaked them.

In certain cases, I think, the addition of *vrg* to *vr* should not be regarded as any sort of qualification of the worth of *vr*. For example, if the person rescued were a wounded general,

and the rescuer were a private soldier, the soldier, unless he had no time to think at all, would know that promotion and other rewards would come his way in case of success. And his action need not be sullied by the reflexion. His duty would be plain independent of this reflexion, but the reflexion would not be irrelevant. If we held anything else we should have to say that the morality of the soldier's act depended largely on his innocence and complete guilelessness. He is no more to be blamed for accepting promotion, or delighting in the thought of it, than the general is to be blamed for accepting a pecuniary grant at the end of the war, although we *might* think better of both if they preferred to receive nothing.

(2) Innocence, in the sense of guileless ignorance, therefore, is never a moral requisite, and is not, as such, morally admirable. The relation between innocent (that is to say, very often, ignorant) intentions and what are called *pure* motives, however, is not at all easy to determine. The purity which consists in "thinking no evil" is a dubious virtue when the evil really exists. We admire the virtue, if we do admire it, æsthetically rather than morally, because we think too many people like to smell out evil and like to linger in the smelling. We cannot really *commend* anyone's wilful or constitutional blindness towards existent evil.

Purity of intention, again, is sometimes called single-mindedness, and it is not uncommon to be single-minded in a mischievous way, that is to say, to see only what we want to see, and to intend only the consequences that appeal to us. Such arbitrary single-mindedness is a moral defect. It is a visionary, not a sane, adjustment to our situation. What is really admirable in a moral sense, I suppose, is the capacity for distinguishing between paramount obligations and lesser considerations in such a way that, when these lesser considerations enter (especially if they are of the kind which, like certain personal advantages, would make the action ignoble if, in the given circumstances, they played a determining part in it), they are kept subordinate to the paramount obligation. As we have seen, however, it is not legitimate to argue that these lesser considerations are irrelevant (or *should not* enter) on the mere ground that, if they did not enter, the action in question would still be our duty.

(3) If by "motive" we mean the emotions we experience in contemplating some possible object of volition, it seems clear that there is a right and a wrong in such motives. We ought to feel the right sort of emotion regarding certain things. In this case the "right" sort of emotion for us

should be distinguished, so far as practice is concerned, from saintly or holy emotion, if the person who feels the emotion is neither saintly nor holy. For it cannot be true that any particular man ought to feel what he cannot feel. It might be true, however, that if he were a better man, he would experience a nobler emotion, and it is conceivable that a man not saintly might experience the same right emotions as a saint would do in certain of his actions, although not in all. Furthermore, it is necessary to remember the distinction between what we are *able* to feel (*i.e.*, practicable feeling) and voluntarily determinable feeling.

VIII.

One other point in conclusion. In this entire discussion, we have been concerned with rightness of conduct, and have therefore dealt with actions either practicable or voluntary.

This was necessary, because ethics *is* concerned with conduct, and because it is principally, if not wholly, concerned with conduct. I am not contending, however, that "right" has *no* meaning except in relation to conduct. On the contrary, I think it clearly has such a meaning.

Take, for example, justice. It is clear that practicable justice has frequently to be rough justice; and this would be true, not only if (as in actual fact) it would be extremely inconvenient to devote a lifetime to the minutiae of some particular case, but if it were absolutely impossible for any judge to know the rights and the wrongs of the case *quite precisely*. Nevertheless, if there *are* just relationships, it would seem absurd to deny that such relationships exist whether or not it is practicable for us to know all or many of them. In such cases right *is* right. What I am saying is only that practicable right also *is* right, and that it concerns philosophical enquiry.

II.—TRANSCENDENCE IN SPINOZA.

BY THOMAS WHITTAKER.

EVERY great philosophical system contains elements that point beyond it. This is true even of the system which is perhaps the most logically compact and rounded of all time; that of Spinoza's *Ethics*. The special doctrines I propose to deal with are transcendent both in this sense and in the more ordinary sense of the term, by which it is opposed to immanent. Spinoza's aim as regards the universe being evidently to explain it from within, the doctrines of the infinity of the attributes of God or Substance and of the eternity of the mind have always puzzled those commentators to whom his ultimate view presented itself as a naturalistic pantheism. And the perplexity has been greater precisely because they definitely belong to the reasoned system and cannot be understood as a residue of theological orthodoxy. In trying to understand them, I have been led to reconsider the sources of the system, especially in the light thrown by the contribution of Dr. Carl Gebhardt to the first volume of the *Chronicon Spinozanum* (1921). To develop the conclusions at which I have arrived, a little recapitulation will be necessary.

The distinguishing character of Spinoza's philosophical doctrine among those of modern times is that it takes the universe for its object without presupposing any inherited system to which its theses have to be made conformable. It thus ranks with the systems of the Greek philosophers as no other does; for if a few modern thinkers have assented as little to positions imposed by authority, none have so combined their freedom with thoroughgoing logic and at the same time avoided giving incidental excuse for treating them as apologists for a traditional faith.

Nothing, however, is without its antecedents, and one important condition of this complete and conscious liberty of philosophising can be traced back through the Renaissance to the Middle Ages. More has been added and is still being added to the proof; but the foundation was laid in what will

probably be the most enduring work of Renan, his *Averroès et l'Averroïsme*. It is largely in consequence of that outcome at once of unwearied labour and of penetrating insight that we can now appreciate at its true value the important part taken by the Moslem world in promoting the emancipation of the West and preparing the recovery of Europe from the age of returned barbarism, as Vico called it, to a renewed intellectual civilisation.

The Arabian philosophers whose studies of Aristotle seemed to the mediæval mind to have culminated in the Great Commentary of Averroes, had, we must remember, both secular and religious contacts with Christendom. The religion of Islam under which they lived was one branch of the Judæo-Christian tradition; and in knowledge of Greek philosophy, from translations into their own language, they had, to about the end of the twelfth century, the advantage over the Latin West. Through a complex process of mediation, they knew the points of view both of Eastern and Western Christians and of the Jews, who were frequently the translators from Arabic through Hebrew into Latin; the Arabic translations of Aristotle having first been made from the Greek through Syriac. In this cosmopolitan culture it was the Arabians who first struck out for philosophical freedom. This they did through a rapid comparison of the three book-religions called revealed with the philosophy of Aristotle. The religions, as they saw, agreed in a kind of ethical theism; teaching that there is one God, who created the world, rules it in accordance with moral law, and has delivered this law to mankind through a revealer. Receiving on the other hand the independent tradition of philosophy, transmitted to them through the latest Neo-Platonists, for whom Aristotle had become the master of the sciences, they found in the philosopher a theology with characters distinguishing it from all the religions. Aristotle's God was indeed one, as against polytheism, but he was not a creator or legislator; and the philosopher's ethics, dealing rationally with the ends of action, presented itself as something independent of command and obedience. Its culmination was a life resembling that of the Deity, in as much as it was a thinking on thought; but this divine life was evidently attainable only by a few, and by them not always. Perhaps from Aristotle's own phrase about the adaptation of some ideas transmitted through popular religion *to the persuasion of the multitude*, they arrived at their own revolutionary idea for facing the intolerant theocracies which had since come into the world. Their effectively new thesis was a clear-cut rejection (stated in peculiar terms) of the

claim of popular religion, even in the forms that were professedly the most purified from heathenism, to be a mode of truth in distinction from utility. Ostensibly they spoke of a *double truth*, philosophical on the one side and theological on the other; but by theology (as contained in the religions) they meant simply the legislation, as they called it, useful for those who lived under it, of Moses, Christ or Mohammed as the case might be. Their own philosophical doctrine was not that of a moral God who had appointed rewards and punishments for obedience or disobedience to His law. For them, pure speculative reason was the highest, and they found it in their interpretation of Aristotle; but, while pursuing philosophic truth, they were ready to be conformists in religion. All the legislations, they said, were alike good for those who had been brought up under them, in so far as they contained ethical precepts similar to those of philosophy, though necessarily practised by the many as an affair of custom and obedience, not of insight.

Of course the official representatives of the revealed religions, when they had the power, could not allow the distinction between two kinds of truth, stated in this form. It was too obviously an evasion of their claims to rule in the names of their lawgivers. By the end of the twelfth century, the Mohammedan clergy, by bringing popular pressure to bear on the Caliphs who out of interest in culture had hitherto supported the philosophers, compelled the withdrawal of toleration. The martyrdom of the philosophers under Islam indeed did not go beyond exile; but their writings, so far as they were properly philosophical and in a religious sense free-thinking, and did not limit themselves to special sciences such as medicine or astronomy, passed into oblivion for their own world.

The torch, however, was handed on to the Christian West through translation into Latin not only of the Arabic versions of Aristotle but of the infidel commentators themselves; and, just when the Church had apparently extinguished the religious heresies of the twelfth century, its chiefs found themselves confronted with a much larger body of ancient thought than had been accessible since the closing of the schools at Athens and the overwhelming of the West by the barbarian invasions. Some credit must be allowed them for deciding to permit the new movement under limits and not simply to crush it out. The Averroist distinction of the double truth was of course officially condemned; but the phrase, as Renan has pointed out, served from the thirteenth to the seventeenth century as some protection for free

thought; and the notion of the separation of theology and philosophy in the sense of the Averroists did not become obsolete until in modern times toleration of a variety of sects within the State had become a definite principle and policy. This policy itself could probably not have been formulated without the preparation for it in the thought of the Middle Ages and the Renaissance.

The claim to liberty of philosophising by Giordano Bruno and Spinoza is in fact more deep-going than the carefully guarded and limited permission to a few not too heterodox sects to exist, which was all that even the most liberal political legislation was able to carry through for a time. And the almost identical positions of Bruno and Spinoza on the relations between philosophy and theology came to them from Averroism. In positive doctrine, indeed, neither of them can be called an Averroist; for they did not hold the distinctive view of the Arabians put forth as an interpretation of Aristotle's utterances about the active and the potential intellect; though traces of it lingered on in both. The distinction, however, between philosophy and theology, evolved to defend one heterodoxy, was capable of being turned to the defence of heterodoxy in general; and it could not be more generalised than it was by Bruno first and then by Spinoza.

No doubt the *Tractatus Theologico-Politicus* is far more systematic than anything in its kind that had gone before; but in its fundamental distinction between the many who live by a law formulated in books or in the creeds of a Church and the few who live by insight, it does not deviate from the positions of the Arabians or of a thinker of the early Renaissance like Pomponazzi. Where it is modern is in its definite foundation of Biblical criticism and in its appeal to the State as distinguished from the representatives of theology. Even Bruno, for example, in the late sixteenth century, could still appeal for recognition of the liberty of philosophising to those whom he called the not less learned than religious theologians. He had received his answer from the theologians of the Holy Office. Spinoza, proceeding on this side from Hobbes, argued for the sole right of the civil power to determine what shall be taught or not be taught on religion, and went beyond Hobbes in explicitly declaring that the liberty of philosophising is not only advantageous to the commonwealth but is indispensable to its safety and welfare. Having made this perfectly clear, he was ready to show that the Scriptures, Hebrew and Christian, if rightly interpreted, and if things belonging merely to the time and the particular views of the writers are set aside, furnish a basis for an ethical

theism which the State may adopt as official, leaving philosophers free to seek deeper insight than is possible for those who follow the moral law merely through obedience to legislators whether civil or religious. Of the freedom thus claimed he made the fullest use in the *Ethics*. The link, which at the same time indicates the contrast, between the two treatises, may be found in *Eth.* ii., Prop. 3, Schol.: *Nemo ea quae volo percipere recte poterit, nisi magnopere caveat, ne Dei potentiam cum humana regum potentia vel iure confundat.* For popular religion, even when most purified, moral precepts are divine commands obeyed in view of rewards and punishments. For speculative philosophy, divine commands (if the expression may be used) and necessity of nature are one and the same; and the whole of nature cannot be interpreted as adapted to the purposes of man; whose utility is indeed the measure in determining rational precepts for his own conduct, but does not enable the mind to infer what are the laws of that Nature which is greater than man and includes him as a small part. Nature in this sense and God are identical; and, when we have attained this view, we shall no longer reproach even the weaknesses and absurdities of men, since now they are seen as no less illustrating the power of nature, if not of man, than the things which we admire and in the contemplation of which we take delight (*Eth.* iv., Prop. 57, Schol.).

But here another question arises. Is not the content of the great philosophical systems religious in its own manner? It has at least this in common with the religions, that it goes beyond facts and laws of phenomena to a view of the whole which is not verifiable in the terms of science and common sense. And in detail we find a doctrine like Spinoza's in some respects coincident with that of philosophers who took themselves to be orthodox theologians. One of the most audaciously naturalistic propositions in the *Ethics* (Part iv., Prop. 68), by which it is affirmed that for the free man, who has adequate ideas, the words *good* and *evil* would have no meaning, has been found to be taken over from Maimonides, who in the twelfth century set himself, with a full knowledge of what had been done by the Arabians, to rationalise Jewish orthodoxy on the basis of Platonic and Aristotelian philosophy. For, according to Maimonides, the story of man's innocence before the Fall signifies that the knowledge of good and evil is not a knowledge of the nature of things as they really are. Spinoza himself, it may be noted, does not disdain to continue the use of the story as symbol; adding to it an interpretation of redemption by the spirit of Christ as a setting free of men from the illusion signified by the Fall. And he

could easily have found other precedents in ostensibly orthodox mediæval thinkers, Jewish or Christian ; who often in effect use the sacred stories as no more than images of truth. Even in the most modern times, we may add, no thinker can altogether dispense with myth and legend to give colour. For myth and legend are creations of the human mind ; and logic does not create, as science does not complete its work without imaginative extension. Thus, all things considered, we need have no difficulty in admitting that the great philosophies and the great religions at their highest point have much in common. And in no philosopher is there less difficulty in finding the point of contact with religious minds than in Spinoza ; whose end, above the moral virtues, is essentially that of the mystics—the contemplative life.

It seems to be now ascertained that the first definite affirmation that the theoretic life is the highest began in Greece with the philosophico-religious school of the Pythagoreans. This affirmation was accepted by Plato, though at the same time he argued that contemplative minds ought to be compelled by the State, in its own interests, to descend to the government of practical affairs. The most typical form, perhaps, was given to the doctrine by Aristotle, who thought that the supreme value of the State itself was in making possible this highest life. From Plato and Aristotle, with shades of difference, the general view passed on to Plotinus and his successors, and thence, after finding expression in the writings of mediæval mystics, was taken over into Christian orthodoxy as wrought out dialectically by St. Thomas Aquinas and embodied artistically in Dante's *Paradiso*. Now this strain of thought, through both Jewish and Christian sources, arrived at Spinoza in the text-books he read in his youth ; as was shown by Freudenthal in his epoch-making essay, *Spinoza und die Scholastik*. (This appeared in 1887 in a collection of Philosophical Essays dedicated to Eduard Zeller : see the remarks of Dr. Carl Gebhardt in his obituary notice of Jacob Freudenthal in the *Chronicon Spinozanum*, ii.) In view, therefore, of now demonstrated facts, the schematic construction by which Spinoza's system was treated as simply a necessary development from Descartes, to which the latter part of the *Ethics* might be regarded as an addendum, is completely exploded. The end at which he aimed had been fixed in his own mind before he came in contact with Descartes and modern science. Profoundly as his mature system was influenced by the mathematico-physical ideal of scientific knowledge set up by the great French thinker, the search for the method of discovering truth in the sciences, or

the promotion of natural knowledge, was not his ultimate aim. He could honour not only Descartes but Bacon and English devotees of experiment like Boyle; but for him their distinctive work was only an aid to philosophic insight. His ultimate aim was nothing less than an intuition of absolute truth concerning the whole. Since this intuition, in his philosophy, carried with it emotional acquiescence, it may be said that for Spinoza, more than for any other modern, philosophy became a religion.

Usually he does not himself call it religion, but places it beyond *religion and piety* in the ordinary sense of the terms. For these are, in his view as in that of the Averroists, something practicable by mankind in general without speculative philosophy. (See *Eth.* v., Prop. 41.) The practical virtues associated with religion, he expressly says, retain all their value for the utility of life even if there is nothing beyond them. But for him, as for the mystics, there is something beyond.

It has been disputed whether Spinoza himself was a mystic. If the state of the mystic is a peculiar experience attained by shutting off all grades of articulate knowledge, he was not a mystic; for the highest grade of insight which he deems attainable includes a kind of knowledge. His mysticism, if it is to be called such, is the accompaniment of definite thought, and is nowhere said to be incommunicable. Yet its historical relation to what has always been regarded as typical mysticism is undeniable; and its relation to the similar, but not identical, culminating point of the philosophy of Bruno confirms the derivation. Bruno, too, has the *intellectual love*, though in him it takes the form rather of infinite aspiration (as he himself calls it) than of acquiescence in insight attained. By Bruno also it is not identified with moral virtue, and not brought under the head of religion, which he, too, associates with practice. These resemblances, both in language and in thought, there does not seem to be any sufficient reason for attributing to a direct influence of Bruno on Spinoza. They are perfectly explicable by common sources. Ultimately the spring of the conception of intellectual love in all its forms was Neo-Platonism. Bruno knew the sources in the actual works of the Neo-Platonists; reading Plotinus no doubt in the Latin translation of Marsilio Ficino, which appeared long before the Greek text was printed. (In 1580, when it appeared, Bruno had left Italy and was on his travels.) In common with Spinoza, he was familiar with the intermediate phases. Both philosophers had read the Cabbalists. Above all, there can be no doubt that both had read the *Dialoghi*

d'Amore of Leone Ebreo. The excerpts given by Dr. Carl Gebhardt (*Chronicon Spinozanum*, i.) entirely confirm the inference drawn in the brief study of B. Zimmels (*Leo Hebræus, ein jüdischer Philosoph der Renaissance*, 1886; see MIND, O.S., xi., 593). The phrases indicating both the ultimate sources of Leo himself and his influence as a precursor can be given in small compass. But first, it seems worth while to mention a few cases of coincidence which may warn us against rash inferences of direct borrowing. The real evidence of relationship will then seem all the more conclusive.

If we did not know that Bruno (as also Spinoza) cannot have read John Scotus Erigena, whose works were condemned to the flames by Pope Honorius III. in 1225 and had passed out of sight till 1681, the case for direct influence would be very strong. For Erigena and Bruno quote the same lines of Virgil, and the same verse of the same psalm, to exactly the same philosophic purpose; namely, to enforce their own positions as regards the immanence of the world-spirit and the coincidence of contraries. Again, in the time of Shelley, Bruno's works were inaccessible except in a few scattered copies, and it is unlikely that the poet had met with any of them; yet the well-known metaphors in which the moth and the flame represent the lover and the beloved, and Actæon and his hounds figure intellectual love, are conspicuous in the *Eroici Furori*. The hounds of Actæon, in Bruno as in Shelley, are interpreted as his own thoughts, of which he is at once the father and the prey. Thus, in even so remarkable a coincidence between Bruno and Spinoza as the following, I do not think we need see anything more than coincidence. The love of divine things, Bruno finds (*Eroici Furori*, Part i., Dial. 5, 13), is not without affliction in desire, any more than the physical love described by the Epicurean poet (*i.e.*, Lucretius); and hence perhaps the wise Hebrew said that he that increaseth knowledge increaseth sorrow. Similarly Spinoza, quoting the same saying from *Ecclesiastes* (*Eth.* iv., Prop. 17, Schol.), uses it to illustrate the weakness of human nature, with which true knowledge has to struggle and by which it may be overpowered. Not, he adds (as Bruno does also), that folly is better than wisdom.

The case for the influence of Neo-Platonism is of a different kind. There are certain crystallised expressions that sum up the whole conception of intellectual love in the same pantheistic sense; and these we find emerging and re-emerging from late antiquity to the Renaissance. We also know in a general way the literary continuity (sometimes along side-

paths) of the philosophy of the Middle Ages and the Renaissance with the last phase of Greek philosophy. Now the final expression, *amor intellectualis*, fixed by Spinoza, is evidently the *voûs êpôv* of Plotinus. Leone Ebreo, whose dates are given as approximately 1460-63 to 1520-35, had no doubt read the Latin translation of the *Enneads* by Marsilio Ficino, which appeared in 1492. In him we find *amore intellettivo* and *amore intellettuale*. Of these Bruno took over the former and Spinoza the latter. Again, when Leo says: *il primo amore si è di Dio a sè stesso*, and, with more circumstance, *in lui l'amante, e l'amato, e il medesimo amore è tutto una cosa* (Excerpts 119, 120) this corresponds to the words of Plotinus (*Enn.* vi., 8, 15): *καὶ ἐράσμιον καὶ ἐρῶς ὁ αὐτὸς καὶ αὐτοῦ ἐρῶς*. The position of Leo that the intellectual love is not a natural passion but an intellectual action, is of course that of Spinoza; and to this there is a corresponding expression in Proclus: *ὁ μὲν θεὸς ἐρῶς ἐνέργειά ἐστιν* (*Comm. in Alcib.* I.). In the intermediate period we find a most decisive witness to the identity of the tradition in John Scotus Erigena: *Caritas in omnibus Deum, id est, se ipsam, diligit* (*De Praedestinatione*, iii., 6). By this the saying of Plotinus given above is linked in the long historical series (though Erigena did not know Plotinus directly and Spinoza did not know Erigena) with the well-known proposition of Spinoza (*Eth.* v., Prop. 35) that *God loves himself with an infinite intellectual love*. Such coincidences are evidently not merely incidental, but point to definite origins; though of course the juxtaposition would be most misleading if we did not bear in mind that inherited philosophical expressions, when worked into the tissue of a doctrine, belong anew to each great thinker as his own.

This is illustrated by the very different developments in the *Eroici Furori* and in the Fifth Part of the *Ethics*. In Bruno they take a poetic form comparable to that of the *Vita Nuova*, which was undoubtedly his literary model. For Dante, indeed, there is a personal object of devotion, at least imaginary, while Bruno avowedly uses the imagery of lovers (and occasionally actual love-poems of his elder Neapolitan contemporary Tansillo, who is an interlocutor in the Dialogues) to communicate the idea of aspiration to intellectual beauty and ultimate truth. This is in complete contrast to Spinoza, who, with all his underlying depth of emotion, nevertheless reduces everything to the rigour of quasi-geometrical demonstration. Moreover, as has been hinted, there is a difference in the type of intellectual love described; which in Spinoza may be said to reach the phase

of beatitude, or acquiescence in the knowledge of its object, while in Bruno it remains an infinite pursuit of the infinite. For in the rare cases where he speaks of the desire as achieved, it seems to end in martyrdom (of which he had a strange prevision) or in an absorption of sense and imagination *like a drop of water or a breath in the immensity of the sea or of the spacious air* (Part ii., Dial. 1, 12). This, however, is not strict doctrine. For Bruno, as for Neo-Platonism, there is in reality neither emergence from a ground nor re-absorption into it. And here, as we shall see later, Spinoza is at one with Bruno and the Neo-Platonists. By Bruno and Spinoza alike, the intellectual love is formally distinguished from religion; though with Bruno it seems occasionally to pass into religion in his own sense of a kind of ethical Stoicism. Incidentally he vindicates Epicureanism as having essentially the same end. Epicurus did not teach what the vulgar suppose, but held that the perfection of virtue is to attain impassibility, or even actual beatitude, in endurance (Part i., Dial. 5, 9). Moral virtue and divine or heroic love, according to Bruno's interpretation of Epicurus, are imperfect unless a feeling of happiness has been joined to them which no evil is able to take away. *That beauty, goodness and truth which is the fountain of all other truth, goodness, beauty* (Part ii., Dial. 1, 9) is to be so pursued that the mind, knowing the vicissitudes of mortal things, shall feel for them neither love nor hate (Part ii., Dial. 1, 4). This has an obvious affinity with some expressions of Spinoza; and in Spinoza also, though, as has been said, the intellectual love of God is usually distinguished from religion, there are passages where an approximation may be observed; as for example in *Eth.* iv., Prop. 37, Schol. 1: *quicquid cupimus et agimus, cuius causa sumus, quatenus Dei habemus ideam, sive quatenus Deum cognoscimus, ad religionem refero.*

Philosophically, Bruno's theory of the individual mind or soul in which the intellectual love comes to consciousness is less determinate than Spinoza's. There is indeed for him one certainty. Soul or form is as much substance as body or matter, and substance is imperishable. He quotes with conviction the lines of Ovid's *Metamorphoses* in which the poet affirms the intangibility of the soul by the accidents of death and dissolution: *morte carent animae*. But, for the rest, he does not definitely choose any one expression of his conviction. He can admit the general human mind of the Averroists as one term in a hierarchy; but he does not therefore deny the permanence of the individual soul as such. This he usually seems to imagine as thrown after death into the hazards of

metempsychosis and forgetting its past life; yet, near the end of the Dialogues, he introduces an argument for a disembodied condition of the soul, or at least for an immortality more strictly personal, from its aspiration to a vision which it does not now possess, but which may be achieved in a *more excellent state* (Part ii., Dial. 4). When he says that the human intellect has infinite potency because it is eternal (Part i., Dial. 5, 12), he means the individual human mind and not the mind of the race.

In the case of Spinoza's eternity of the mind, whatever may be the obscurity of the conception otherwise, no doubt ought to be felt that what is meant is the individual mind. Of the general, or common, human mind of the Averroists there are indeed one or two reminiscences which I had overlooked till they were pointed out. With *Eth.* ii., Axiom 1, may be compared the more explicit statement in *Eth.* i., Prop. 17, Schol.: *Si unius existentia pereat, non ideo alterius peribit; sed si unius essentia destrui posset et fieri falsa, destrueretur etiam alterius essentia.* Yet he classes the notion of *man* as universal among ideas in the highest degree confused (*Eth.* ii., Prop. 40, Schol. 1); and, in the definitive doctrine of the Fifth Part, the *mens* which is eternal is the mind correlated with a particular body, and therefore unquestionably an individual mind.

The doctrine as it is set forth cannot by any means be modernised into Comte's *subjective immortality*, or later theories, on the lines of this, which are sometimes described by the phrase *conservation of values*. According to this type of theory, an achievement of one mind is preserved in the memory of others and then stored up in the social tradition, and so becomes part of a common treasury of thoughts and records of deeds done for humanity. Thus, in terms of Comte's doctrine, a mind that has disappeared objectively (that is to say, from the sum of things actually in the world) lives on subjectively in other minds after the physical death of the individual. Now there is no doubt that such a process does go on socially; and there is a recognition of it in the *Ethics* as rightly a source of mental satisfaction. Like Hobbes, Spinoza did not regard fame as illusory. *Gloria*, he says (*Eth.* iv., Prop. 58), *rationi non repugnat sed ab ea oriri potest.* To take pleasure in reputation, that is to say, can have a good sense when distinguished from *vainglory*. In its good sense *gloria* is defined as *joy accompanied by the idea of some action of ours which we imagine that others praise* (*Eth.* iii., Affect. def. 30). Thus the element of satisfaction in the conviction of a thinker that his thought will be recognised

as serviceable to the human race would not have been disdained by the philosopher who was himself one of the very small number of illustrious minds that we might suppose to have perhaps got beyond Milton's *last infirmity*. This, however, was certainly not what Spinoza meant by the eternity of the mind. For eternity, as he understands it, is something beyond time, even when time is conceived as an illimitable future; which, in the case of human fame, it cannot be, as Cicero, who was as little as any man of letters indifferent to reputation with posterity, had shown in the *Somnium Scipionis*—a relic of antiquity probably well known to Spinoza.

The doctrine of the eternity of the mind, as developed in the Fifth Part of the *Ethics*, when reduced to the minimum of significance, may be stated thus. Every human mind is the correlate, in the attribute of Thought, of the body, or mode of Extension, of which that mind is the *idea*. The existence of the body under certain conditions of time and space implies an essence not thus conditioned. Now this means that it is eternally true that if such and such a body exists, or has existed, or will exist, there is a necessary determination that it should be such and such. (How the body can remain the same while undergoing physical changes is explained in the Lemmas after Prop. 13 of Part ii.) When the mind, or mode of Thought correlated with that body, understands, not by mere experience nor even by reasoning, but by the intuition which finally emerges from reasoning and which is the third kind of knowledge, the eternal necessity that that body should be what it is in essence, there is a knowledge for that mind which is timeless and known as timeless. This eternal truth, known as eternal, is the essence of the individual mind. The insight being *sub specie aeternitatis*, there can be no question either of its coming to exist in time or ceasing to exist. The popular doctrine of the immortality of the soul, Spinoza expressly says, is not, as commonly held—that is, as referring to perpetual duration of an existence in time—philosophically true, but it contains a divination of the truth. In terms that are more Neo-Platonic than his own, but are not inconsistent with his fundamental thought, all have in themselves this eternal essence, but few make use of it. In his own words at the close of the *Ethics*: *Omnia praeclara tam difficilia, quam rara sunt*.

This is the minimum; but various things that Spinoza says show that the meaning, for himself, amounted to more than the minimum. For example: *The human mind cannot be absolutely destroyed with the body, but something of it remains, which is eternal* (*Eth. v., Prop. 23*). The mind is

subject to passive affections, as distinguished from the intellectual love which is an action, only while the body endures (*Eth.* v., Prop. 34). There is nothing in nature which can take away the intellectual love (*Eth.* v., Prop. 37); whereas, when man is considered as a part of nature, the causes outside him far surpass in power the causes within him (*Eth.* iv., Prop. 3; cf. Appendix, cap. 32). Considered as a mode of thinking, as distinguished from imagining—that is, apart from the body, through which images arise—the human mind (by which is meant each individual human mind) is an eternal mode of the infinite intellect of God (*Eth.* v., Prop. 40, Schol.).

Knowledge of this eternity, with acquiescence in the knowledge, we are told, is attainable, and when it is attained the greater and better part of the mind does not perish with the body (*Eth.* v., Prop. 38; cf. Prop. 40, Coroll.). It is to this part that the *amor Dei intellectualis* belongs, and this love is eternal (*Eth.* v., Prop. 33), being a part of the infinite intellectual love with which God loves himself (*Eth.* v., Prop. 36).

Since acquiescence in the knowledge is beatitude, it follows that Spinoza had arrived at the conviction that in some sense the individual human mind may attain conscious eternal beatitude. It is clear, however, that in his view only few minds attain it; and there has always remained the difficulty that not all the subtleties of the exposition seem to make it quite compatible with the strict parallelism of the attributes of Thought and Extension.

It is not merely in the Fifth Part that the divergence appears. Turning back to Part ii., we find a similar difficulty arising within the complex doctrine of the *idea mentis* or *idea ideae* (Props. 20, 21). There is an idea of the mind, as the mind is the idea of the body; and this, we learn, is introspective knowledge, knowing that one knows (Prop. 21, Schol.). And, although it is said that *the idea of the mind and the mind itself are one and the same thing, conceived under one and the same attribute, namely, Thought*; or, as it is explained, if we know, we also know that we know; it is not made evident how there can be anything in the attribute of Extension to correspond to this duplication and reduplication in introspective knowledge. Body, Proclus said, cannot turn back upon itself, the whole to the whole; and Spinoza does not try to prove that it can. His own thought, finally expressed, is, as we have seen, that the best part of the human mind is transcendent to the human body. And in all this, it must be repeated (as others have said before), there is no accommodation to popular beliefs. So severe is the philosophical attitude that it seems almost incongruous to mention the

absence of all play of fancy regarding the mind as manifested in time; though, in strict theory, this need not have been excluded; for it does not seem to follow, from the positive part of the doctrine, that each individual mind has only one embodied existence in the course of everlasting time. All that can be said is that eternal essence, in Spinoza's sense, does not necessarily involve more than one temporal embodiment. But this it undoubtedly involves, since there cannot be an essence without something of which it is the essence (*Eth.* ii., def. 2); and, since each thing is one, conceived under the two attributes, how is it permissible, within the doctrine, to set one of the two aspects free, as it were, from its concomitant? Was not Leibniz, having borrowed the parallelism from Spinoza, more logical in asserting successive re-embodiments of the minds or souls which he supposes to go on? Spinoza understood by the essence of the human body, not a particular collocation of particles, but a certain mode of order continuous amid the flux of its parts. Why should this mode not be repeated in new collocations corresponding to new temporal manifestations of the eternal mode that is the mind?

This is arguable; but to follow it out would be to depart from Spinoza's system. Within that system, it seems to me that we have come upon a difficulty not wholly soluble in its own terms, but profoundly suggestive in relation to the future of philosophy. Careful students of the *Ethics* have pointed out that it does not begin, like Descartes' *Principia*, with even a slight outline of theory of knowledge, but plunges directly into what we call, in the opposite use of the term to Spinoza's, an objective deduction of the order of the universe from the nature of Reality. Now the predominant movement of distinctively modern philosophy from Descartes to Kant has been in theory of knowledge. Descartes began by inquiring what is left if we set ourselves to doubt everything. His answer was that primary certainty is on the side of what we now call subjective thought. He was, however, too eager to proceed to the task of constituting scientific knowledge to delay long over what Aristotle had called first philosophy; and the importance of Descartes' influence on Spinoza consisted mainly in furnishing a model and a basis for the sure knowledge of nature in mathematical physics. Locke turned back to preliminary questions about the power of the mind to know; and the succession was continued through Leibniz (in the *Nouveaux Essais*) on the one side, and on the other side through Berkeley and Hume, to Kant's three *Critiques*. Hence it is not surprising that the later world, going back to

the *Ethics* for inspiration on ultimate questions about the universe, should, in the light of analysis carried on for more than a century, find clefts in such a pre-eminently synthetic construction. The remarkable thing rather is that Spinoza himself, following out his direct synthetic method in the rigorous manner of a schoolman, should in the course of his demonstrations raise the subtlest questions as to what we now call the relation between subject and object; which were really easier to state in the syllogistic method of the schoolmen themselves than by the quasi-geometrical method first adopted by him as a means of expounding not his own philosophy but the philosophy of Descartes.

To understand the position more fully, we must turn to the other element of transcendence in Spinoza's system. The two elements are in reality closely connected; for the eternity of the mind reveals in the case of the microcosm precisely what the infinite attributes reveal in the case of the macrocosm; namely, that Spinoza's ultimate doctrine leans by its intrinsic nature to the idealistic as distinguished from the naturalistic side.

His naturalism has indeed been thought to be the completest possible; and it is true that his originality as compared with his ancient and mediæval precursors nowhere comes out more distinctly than in his grasp of the mechanistic view of nature as prefigured by one side of Descartes' system. Here he made an immense advance on Descartes himself; for the parallelism of the attributes of Thought and Extension is not Descartes' own doctrine, though it was suggested by it. Descartes held that there are two substances, extended substance and thinking substance, which must be conceived as different in kind and yet as interacting. Both were created by divine volition and cannot continue without it. They are therefore not substances in the sense in which we say that God is Substance. Within the Cartesian school the nature of the interaction between the two substances, and even its possibility, raised endless problems. These Spinoza seemed to have effectively got rid of at a stroke by recognising only one Substance, which is God, and putting in place of extended things and thinking things the conception of these as modes of the two attributes of Extension and Thought. Each thing in nature can be regarded as a single thing with two sides; at once an extended thing marked off from other portions of Extension, and a thinking thing because every portion of Extension has a portion of Thought correlated with it. Between the modes of one attribute and the modes of the other there is no interaction. Everything that appears

to us as body is in its degree animated (*Eth.* ii., Prop. 13, Schol.); and the causal series on the side of the animation of the universe is as unbroken as the mathematico-mechanical sequence that might be traced out by a completed physical science on the side of body.

In dismissing interaction, it may be incidentally observed, Spinoza got rid of a serious psychological error of the Cartesian system. He denies, and gives conclusive reasons for denying, the antithesis of Descartes between will which is infinite and intellect which is finite (*Eth.* ii., Prop. 49, Schol.). Any kind of infinity that may be ascribed to the will can be affirmed also of intellect if intellect is taken in the widest sense. Here there is a coincidence with Bruno, who asserted the infinity of both intellect and will. *Non è terminato* (he says in the *Argument* prefixed to the *Eroici Furori*) *l'atto de la volontà circa il bene, come è infinito et interminabile l'atto de la cognizione circa il vero.*

So impressively was the doctrine of parallelism stated that in the nineteenth century it almost, but not quite, became scientific orthodoxy. Its fascination was in an apparent clearness for which physical science has less care since, for mathematicians, algebraical symbolism has tended to efface geometrical intuition. At present the whole question is again highly controversial; and it is interesting to note that from within Spinoza's system there arose certain puzzles which he could not solve to the complete satisfaction of sympathetic students in his own time.

The great difficulty with which he was confronted did not arise within each attribute, but in the relation of Thought first to Extension and then to the infinite attributes; which include Thought and Extension as the two known to us. That there should be more attributes than those that we know (whatever those may be) was a deduction from the notion of Substance if it was allowed to have attributes. For God as Substance, it was affirmed in the inherited philosophical theology, is infinite, and this infinity is absolute. The conception of absolute infinity, then, being applied to any question raised about the attributes, there seemed to be no reason for stopping short at any finite number (*Eth.* i., Prop. 10, Schol.). Of necessity the progression had been the same for the Greek as for the Hebrew monotheistic idea when it passed over into pantheism. It is by exactly the same type of reasoning that Melissus, in the Eleatic school, and Spinoza, proceeding from Scholasticism and Descartes, prove the mutual implication of unity and infinity in that which is ultimately real. The only difference between *Eth.* i., Prop. 8 and

Melissus, Fr. 6, is that Spinoza proves the infinity of Substance from its unity and Melissus the unity of Being, or that which is, from its infinity: *εἰ γὰρ εἷη, ἐν εἷη ἄν· εἰ γὰρ δύο εἷη, οὐκ ἂν δύναίτο ἄπειρα εἶναι, ἀλλ' ἔχοι ἂν πείρατα πρὸς ἀλλήλα*. Now these are equally in both cases propositions about Deity stated in technical language. Poetically, but probably on the basis of some pre-existent philosophical theology, transcendence together with immanence had already been asserted by Aeschylus: *Zeus is all things and what is beyond them*.

But can attributes not known to us have any meaning conceivable by us? This question was most acutely raised by Spinoza's friend and correspondent Tschirnhaus. The correspondence has been found rather tantalising; but I think there is, in the concluding fragment of a letter from Spinoza (Ep. 68, Bruder), not indeed a solution in terms of the system as it stands, but a clear indication of the predominantly idealistic character of the doctrine. For it appears from the letter that, when pressed, Spinoza was obliged to affirm that there is not simply an infinity of ideas corresponding to the infinity of the attribute of Extension, but that each of the other attributes must be conceived as having infinite *ideas or minds* of its own. Thus, if we follow the train of reasoning to its logical conclusion, we must suppose the attribute of Extension to be the basis of one phenomenal world, namely, our own world of ideas; while the attribute of Thought (or animation) contains also infinite other worlds of phenomena correlated with the other attributes; and so is infinitely infinite as contrasted with the simple infinity of each attribute other than Thought. Now mathematico-mechanical method is directly applicable only to Extension; hence the order of things which it presents to us seems to shrink into complete subordination to absolute or universal Thought, which is as boundless as the whole of Reality, since everything that exists, whether known or unknown to us, has necessarily its expression in some idea or mind.

This, as we know, did not become Spinoza's actual teaching. The structure of the *Ethics* was not modified by the criticism. And his conviction is fundamental that mathematical method gives an insight into reality which nothing else can give. Without it, truth would have remained for ever concealed from the human race, and the illusion of final causes would never have been seen through (*cf.* Appendix to Part i.). Beyond the effort by which each individual thing strives to preserve its being (*suum esse conservare conatur*) there is nothing in the universe that can be called teleology; and this also, no doubt, according to Spinoza's general philosophy

ought to be capable ultimately of resolution into mathematico-mechanical necessity. What his doctrine might have been if he had lived earlier or later than the seventeenth century we cannot tell. We can but say that his pantheism was, in its actual statement, neither that of a Platonist of the Renaissance nor of a modern Evolutionist. Its distinctive form is traceable directly to Descartes (*Principia Philosophiae*, iii., §§ 2, 3) who (in this agreeing with the non-mathematical Bacon) laid down the rule that we are not to presume to explain the unknown by imagined purposes of God. Descartes himself was decidedly a theist without any perceptible tinge of pantheism; but, while not denying final causes, he treats it as extremely improbable that everything in the universe was designed for the sake of man; and the imagination that they are thus designed became for Spinoza the very type of the delusion that had set the human mind for ages on the wrong track. Now we may protest that the mechanical model of explanation, when taken as absolute and applied to the cosmos, is shown by modern theory of knowledge to have no ultimate theoretical validity; and that the profoundly impressive passages in which Spinoza identifies universal necessity with mathematico-mechanical determination, like similar passages in Lucretius founded on the obsolete Epicurean physics, while they belong to the permanently great things in literature, are not verifiable science. Yet, when all has been said, there was in both cases an immense liberation. For the most stringent exclusion of all purpose from nature delivers the moralist most completely from what has been called the naturalistic fallacy. If ends in nature are denied, human life is left to be determined by the ideals of humanity. The precept *Follow nature*, if this means the nature that is external to man, conceived not as fact or uniformity but as a power issuing commands, becomes for any one who has really understood Spinoza, the fallacy of trying to turn *is* into *ought*. For those who, starting with that effort to preserve themselves which is the basis of virtue, live according to reason, the ultimate end becomes the common good of mankind. As he shows by calm analysis of the affections, the *conatus* by which everyone aims at self-conservation is fulfilled not by hate and discord but by love and concord. And it is interesting to note that, in exemption from the fallacy of taking non-human nature for a preceptress (thus providing arguments for Edmund in *King Lear*, or for the actual Archelaus of Macedonia as viewed by his theoretical admirers in Plato's *Gorgias*), he is at one with his great pantheistic precursors, teleologists though they were in their manner. Perfection in his own kind is the aim of man for

himself, but not to go beyond the kind (*Eth.* iv., Praefatio). This is also a thought of Nicholas of Cusa. Similarly Bruno says that to cease to be of its kind is for any being the thing most feared: as gods most fear to lose their identity as gods (*Giove sommamente teme di non esser Giove*), so the horse most fears to cease to be a horse (*Spaccio della Bestia Trionfante*, Dial. 1); a thought for which the reason, agreeing with that of Bruno, is given by Spinoza: *equus namque ex. gr. tam destruitur, si in hominem, quam si in insectum mutetur*. Suicide (as Schopenhauer also says) always proceeds from causes external to the self. Self-destruction can never be directly an end. As an event its occurrence can be explained: *At quod homo ex necessitate suae naturae conetur non existere vel in aliam formam mutari, tam est impossibile, quam quod ex nihilo aliquid fiat* (*Eth.* iv., Prop. 20, Schol.).

But this does not mean that in man any more than in nature all degrees of reality are equal. No one has more definitely insisted that to have more varied powers of perceiving, imagining and acting is to be higher in the scale of being. While *the highest good of those who follow virtue is common to all, and all can equally enjoy it* (*Eth.* iv., Prop. 36), there are many kinds of bodily and mental culture of which the attainment can be approved though they are not the highest. Spinoza would have agreed with Bruno, and on the same ground, that to arrive at a level is not the ideal of humanity. Since there are degrees in the mind, says Bruno (*Eroici Furori*, Part ii., Dial. 2), the order of things should not be so perverted *che al fine succeda certa neutralità, e bestiale equalità, quale si ritrova in certe deserte et inculte repubbliche*. Though few live according to the dictate of reason, says Spinoza (*Eth.* iv., Prop. 35, Schol.), yet from the actual order of society, adapted to ordinary human nature, more advantages than evils result; so that human civilised life is to be preferred in every way to that of brutes. As indications for the conduct of the individual life, two sentences sum up his attitude. *Things are in so far good as they help man to enjoy the life of the mind, which is defined by intelligence* (*Eth.* iv., Appendix, cap. 5). *The things that happen to us in opposition to that which the consideration of our utility demands, we shall bear with equal mind, if we are conscious that we have performed what belongs to us* (*si conscii simus nos functos nostro officio fuisse*) *and that the power we possess could not have extended itself so far as to enable us to avoid them* (cap. 32). For, as Spinoza adds in Stoic vein, we are parts of the whole of nature and have to follow; and when our better part, which is intelligence, understands this, it will acquiesce and seek to persevere in its acquiescence.

III.—SELF-IDENTITY.

BY H. J. PATON.

I.

THE doctrine which I wish in this paper to defend is the doctrine of self-identity. This doctrine appears to me to be of great, and even vital, importance at the present time. The recent advances of modern science have suggested to those who are best qualified to speak that it is expedient, or even necessary, to abandon the category of substance in our dealings with the physical world. The ultimate unit of our reflexion is to be the event and not the thing, the movement and not the thing which moves. Physical things, as accepted by ordinary consciousness and, I suppose, by an old-fashioned science, are to be analysed without remainder into events, or series of events, interrelated in accordance with certain principles which we may, or may not, be able to understand. And it is only natural, and indeed right, that an attempt should be made to discover whether the same methods may not be profitably applied in the mental, as well as in the physical, world. In short, the theory is being propounded that minds can be analysed without remainder into a series of mental events, or even of events which are not mental, related to one another in accordance with certain principles or laws. It is this theory which my paper by its title is intended to reject.

I hold indeed no brief for the category of substance, although an ignorant man may perhaps be permitted to doubt whether a category which has played its part for over two thousand years is to be so lightly dismissed. But it is to be observed here that the principle of self-identity, as I understand it, is not necessarily a doctrine of mental substances; and perhaps one word may be permitted on the historical setting within which this principle offers itself for our approval or our condemnation. By this means it may be possible to remove certain ambiguities, and to make it clear that the identity, or if you prefer it the unity, which I seek to justify, is the

identity or unity of the self, not as an object known, but as itself a knower. The same principles must indeed apply also to the self as an agent or doer, but it will be simpler, if we confine ourselves mainly to a consideration of the cognitive rather than of the practical activity. The general problem, however, is the problem of the identity or unity of the self, not as an object, but as a subject; *i.e.* not merely as something that can be known, but as something that can will and feel and know.

Modern philosophy begins with an assertion of the fundamental importance of the knowing¹ self for philosophy. 'I think, therefore I am.' It was in this principle that Descartes imagined himself to have found at once a core of certainty which could resist the most obstinate endeavours of philosophical scepticism, and a fruitful germ of further philosophical growth. Unfortunately, however, our powers of doubting seem to have developed considerably since his time, and it appears to be possible for a philosopher of to-day to doubt even whether he himself is thinking. Furthermore the subsequent development of philosophy has made it abundantly clear that the principle 'Cogito ergo sum' is itself one which requires interpretation and justification. Mr. David Hume anticipated modern discoveries by analysing the mind into a number of distinct existences between which he could discover no real connexions. It was this doctrine among others which Kant set himself to refute. The situation which faces us to-day is this. On the one hand Kant imagined that he had refuted this doctrine, and re-established at any rate the first part of Descartes' principle. On the other hand, although his contention has in the main been accepted by many able thinkers, and has been the source of the immense stream of modern idealistic thought, it appears to be not so much rejected, as simply ignored, by the pioneers of the new doctrines. This makes it difficult for us to know wherein they think that Kant was mistaken, and wherein they think that they have improved upon his theory. The subject is consequently a vast one, and the present paper can touch only upon its fringes. What I propose to do is this: firstly to state Kant's argument from my own point of view, and secondly to examine briefly some modern theories which may appear to offer us some satisfactory substitute.

In so doing I will make use mainly of Mr. Broad's book entitled *The Mind and its Place in Nature*. In these matters

¹ This remains true, although Descartes included more than cognition under 'thinking'.

Mr. Russell is perhaps more worthy of consideration as the pioneer of the new philosophy of mind, but Mr. Broad has the great merit of being less in love with paradox, and more willing to consider the theories with which he disagrees. I am not here concerned with the details of their various theories, but rather with the general principles which they seem to hold in common. Similarly I am not concerned with questions of Kantian scholarship, but only with a certain argument suggested by Kant which appears to me to be sound. I must, however, state the argument at some length, and trust that I may be forgiven if I occupy a little time in traversing what is very familiar ground.

II.

I suppose it is admitted even by the most practised doubters that we are aware of change or succession in time. Colour succeeds colour, and sound succeeds sound, and we are aware that this is so. Even this statement no doubt has its difficulties, and is to be taken only as an indication of the facts to be explained, and not as an explanation of them. For example, it must not be taken as committing us to the reality of a number of self-identical ego's—or we should be begging the whole question. Again it does not assert awareness of change, or of time, apart from what changes in time; and in asserting awareness of what changes in time it is not asserting the reality of things, or of substances, which change. The statement is to be taken as indicating a bare minimum of fact about which we propose to theorise. On the other hand it does appear to make one very big assumption, namely that there is a difference between awareness of change in time, and the change in time itself of which there is awareness. In brief, it makes the assumption of a difference between the knowing and the known.

This assumption I do not propose to discuss, but obviously two very important questions arise: (1) How does this difference itself come to be known? and (2) How can this difference itself be defended or justified? It should indeed be observed that these questions themselves presuppose the very distinction between the knowing and the known whose origin and justification they demand. It would appear that we cannot think at all without making this distinction; although here again we make our justification by assuming precisely what we are asked to justify. The distinction is, however, assumed, and even emphasised, by realists in a way which sometimes seems to me to imply unconsciousness of the

difficulties involved. We may therefore accept it as a basis common to all present-day schools of thought, but we must remember that if any one questions it—and it may be that Mr. Russell does question it—we have here a part of our argument which will demand subsequent reconsideration.

The question of the origin of our knowledge of the distinction is of less importance. I take it that for the first stage of consciousness this distinction cannot possibly exist, any more than can the equally fundamental distinction of appearance and reality. It is difficult to understand how these distinctions could ever come to exist for a consciousness which originally was unaware of them. I would only suggest that the difficulty is perhaps no greater as regards the one distinction than as regards the other, and that the development of the distinction between appearance and reality must involve also the development of the distinction between the knowing and the known. I imagine that such a view would be supported by Kant and also by Hegel.

We start our argument then from a knowing of changes in time, and the question is what does this imply? Let us take the simplest example. Let us suppose we are listening to the striking of a clock, and that we count 12 successive strokes. The straightforward account of the facts is this. We must firstly hear each of the strokes—that is Kant's synthesis of apprehension in intuition. Secondly, the earlier strokes must not disappear from our consciousness as the later strokes are being heard—that is Kant's synthesis of reproduction in imagination. Thirdly, it would be no use reproducing the earlier strokes in our imagination unless we recognised that what is reproduced is the same as what we were conscious of earlier. Or, more subjectively, we must recognise what we have been doing, namely that we have been hearing one stroke after another, or adding one unit to another. It is only in this way that we can grasp the whole series as a unit or unity or whole, *e.g.*, as 12 strokes. This is the synthesis of recognition in the concept. The same principles hold even if we are merely to be aware of one stroke being after another, apart altogether from the question of counting. And this means—if we may sum up the argument—that in order to know a series of appearances in time there must be (*a*) one consciousness, and (*b*) a concept under which the various appearances are united. It is only when this is so that there is more than a string of subjective sensations, that there is in short an object. The object in this sense is dependent on the unity of the self, as the unity of the self is dependent on it, or is manifested in regard to it.

Now I am far from denying that there are difficulties in this argument. I do not think it wise to speak of a three-fold synthesis, and I doubt whether Kant himself believed that there was a three-fold synthesis. There is really only one synthesis—which we are describing here in fragments (*abgesondert und einzeln*).¹ I doubt also whether it is necessary to speak of a reproduction in imagination. All that we require is memory, and it is at least a question whether memory necessarily involves the reproduction of images *like* the past appearances. It is perhaps also doubtful whether we need be aware of the subjective side of the transaction in order to apprehend the succession. Self-identity might conceivably be present apart from consciousness of self-identity. Lastly it is not to be assumed that any sound heard could be so heard apart from the rest of the process described. We are not suggesting that atomic sensations are possible, but are rather suggesting with Kant that there is no sensation (whether in the significance of sensing, or of *sensum*) apart from imagination and understanding. We are not explaining how consciousness of change in time develops out of isolated momentary sensations. Rather we begin with apprehension of change in time, and attempt to analyse the different elements which are necessarily involved in it.

So much for the argument. The conclusion of the argument likewise demands further interpretation. The meaning of the conclusion may turn out to be relatively thin—Kant's discussion of the Paralogisms itself warns us against resting more upon this conclusion than it will properly bear. Certainly we must not be supposed by it to mean that the self or mind is a substance. The category of substance, if it applies at all, applies (on Kantian principles) to objects of mind *qua* objects of mind. The identity which by this argument we attribute to the self is not the identity which belongs to the object *qua* object. The identity which we attribute to the self is not such identity as is necessary for it to be known. It is rather such self-identity as is necessary if there is to be knowing of any object whatsoever (object being here taken to mean something known which changes in, or lasts through, time, and has its own quite different kind of identity). There can be nothing more misleading than to confuse this question of the necessary identity of the self as knowing with the quite different question of the identity of the self merely as something known. We are here interested, not in the self-identity of the object-self, but in the self-identity of the subject-self.

¹ Kant, *Kritik der reinen Vernunft*, A 115.

No doubt this raises very important questions as to the relation between the subject-self and the object-self, or if you prefer it between the transcendental self and the empirical self. It compels us to ask whether the difference can really be so great as seems to be implied; and whether the subject-self is to be regarded as some sort of timeless entity abstracted from its own acts of knowing and willing, having no other character than that of being the subject-self, and being the necessary condition of any object's being known. We, however, are not concerned, either with the difficulties of the conception, or with the consequences as to the nature of the known world which have been drawn from it by Kant and his idealist successors. All we are concerned with here is the *prima facie* truth of the conception, as one which it is impossible to ignore, and which must be further explicated in any account of the nature of mind or spirit.

Taken on this basis it seems to me that Kant's argument is unanswerable, and his conclusion sound. There must be one self which is the same self in its different apprehensions, if there is to be apprehension of any temporal object, and still more if there is to be knowledge of an objective and ordered world. This one self is not (or at the very least is not *just*) a part of the world which it knows. If it makes itself an object, and so sets itself beside its other objects in an objective world, none the less *it* is still the subject of all objects whatsoever, including that self upon which it seeks to reflect. The subject-self is always the centre of its whole world however much it may be thought of as passing from one apprehension to another. Mr. Russell in his *ABC of Relativity*,¹ speaking of a fly which sets up ripples by touching the surface of a stagnant pool, asserts that if the pool were ether and the ripples rays of light, then, no matter how the fly might move from the original point of contact, it would always find itself (provided it was a skilled physicist) exactly at the centre of the ripples. It is something of the same kind which appears to hold as regards the character of the subject-self.

I say this argument appears to me unanswerable, for the reason that a series of mental events or knowings, however intimately related to one another, or to that bodily feeling which is nowadays called upon to perform so many functions, is absolutely useless as a means of knowing a change or succession in time. If each mental event can, so to speak, stand by itself without support, then it is really a separate momentary, or at any rate temporarily limited, self. And

¹ P. 37.

clearly if the twelve strokes are heard by twelve different selves, there is no hearing, or at any rate no knowing, of the twelve strokes. Twelve ideas of one are not the idea of a dozen, and a succession of ideas is quite different from an idea of succession.

This argument then appears to be sound, and, if sound, it is obviously important. None the less, it is entirely disregarded, if I am not mistaken, by some of the most acute of modern thinkers. Mr. Russell¹ regards Kant as a 'mere misfortune'. Those of us who believe otherwise may, however, reasonably ask to be enlightened as to the error of this particular argument, but I am not aware that Mr. Russell has hitherto offered us this enlightenment. Mr. Broad is perhaps referring loosely to this theory when he talks of the 'Pure Ego,' but his views of the Pure Ego appear to be at once so vague, and so unusual, that it is hard to see what is the bearing of his argument. Certainly I am not acquainted with any argument in which the view I have expounded is subjected to refutation. I am compelled, therefore, to embark upon an attempt to discover by inference how my present argument is to be refuted, or how it has been superseded by the advance of modern thought. Three main points are raised by the argument I have expounded: (1) the apprehension of change in time; (2) the nature of memory; and (3) the unity or identity of the self. These three points are all discussed by Mr. Broad. I propose to go therefore mainly to him for information, and my object in doing so is to consider, as briefly as may be, whether his contentions go any way towards the refutation of the doctrine which I am here supporting.

III.

The first question then is the question of the apprehension of change in time, and what I wish to examine in this connexion is the new doctrine that change in time is literally *sensed* in what is called the 'Specious Present'.

This doctrine—which may be called the doctrine of the Specious Present—has the merit of starting from a fact, and from a fact which, so far as I can remember, is not mentioned by Kant. That fact is that we can see a quick movement as a whole. We can see the movement of the second hand of a watch, although we probably cannot see the movement of the minute-hand, and certainly cannot see the movement of the hour-hand. There is a manifest difference between

¹ *Outline of Philosophy*, p. 83.

actually seeing a movement, and recognising that something has moved because we see it in one place and remember that it was in another place.

Such then is the fact. What of its interpretation? A summary account is given by Mr. Russell,¹ and a very elaborate account is given by Mr. Broad.² They both maintain that a movement of definite duration is literally sensed as a whole. We do not have to remember the beginning of the movement when we get to the end. This is asserted to imply that we are actually sensing both the beginning and the end of the movement at the same moment of time.

Mr. Russell appears to take the last statement quite literally. He says, 'Thus not only an instant, but a short finite time, is sensibly present to you at any moment. This short finite time is called the "specious present"'. Mr. Broad also says, 'I take it to be a fact that this [momentary] act grasps an event of finite duration which stretches back from a moment t' , to a moment t , which is earlier by an amount τ '. Mr. Broad seems to base his argument on this fact, but this is perhaps merely for purposes of exposition. He modifies his statement later by making use of the method of Extensive Abstraction—although what precisely he gains by that, and how it enables him to correct his original starting-point of fact, I have so far not been able to understand. I do not, however, think this modification is important for the purposes of the present argument.

If we take this doctrine quite literally, it follows that two momentary acts of sensing, provided that the lapse of time between them is less than the 'Specious Present,' have actually a part of what each senses in common. This, according to Mr. Broad,³ enables us to understand 'how two successive adjacent fields, which no act, however short, can sense together are joined up with each other in nature to form a single long event.'

We must recognise that this raises very difficult questions, and what I am about to say is not an essential part of my argument. It appears to me to be quite impossible that in an atomic moment we can sense a change which begins before that moment and continues up to that moment. I do not indeed believe that in an atomic moment we could sense anything, any more than we could see colour in a mathematical point. But if we waive that difficulty, and remember that we are dealing only with *sensa* (which if they are

¹ *Outline of Philosophy*, p. 205.

² *Scientific Thought*, p. 346 ff.

³ *Ibid.*, p. 353.

anything at all can exist only as sensed), then surely the *sensa* must be at the time they are sensed, and it is impossible to sense *sensa* which are earlier than the time at which they are sensed. The contrary hypothesis has to me no meaning, and I cannot accept it as 'a fact' from which our theorising has to start.

Putting the matter in another way, it seems to me that if in a moment I can sense several different positions of a second hand, then these different positions would be sensed as being all at the same moment. That is to say what I should sense would not be a movement, but a stationary fan covering a certain area, and perhaps getting gradually brighter towards one end. Anything else would surely be a miracle. You can't see a *sensum* that isn't there. If you see it, it is there at the time you see it.

We need not however press these arguments. Any act of sensing must take time, and we cannot make it up out of momentary sensings, any more than we can make up a movement out of a series of positions in which a flying arrow is at rest. To do Mr. Broad justice, I think he recognises this, although his precise position is a little obscure to the non-mathematical mind. No doubt, this view also raises problems, and I should be inclined to hold that even the briefest act of sensing implied the unity of the self as well as imagination, memory, and thought. But it is not necessary for me to base my argument on this contention.

My main contention is much more simple. It is just this. Let us grant without further enquiry that in one brief, although not instantaneous, act we can sense a change in time. And let us grant that, on the analogy of this, we can conceive how two changes in time which are sensed in different brief acts can be fitted together so as to form a single event or object. It still remains true that it would be quite impossible for this to happen, unless it was the same self which performed both acts of sensing, and unless the self remembered the first act by the time it got to the second, and recognised them as forming parts of the same process. We can put the argument, if we prefer it, in regard to the two changes sensed instead of in regard to the two acts of sensing. In either case the doctrine of the 'Specious Present,' while interesting in itself, does nothing whatever to modify our original conclusion.

IV.

Clearly the argument must therefore turn on the nature of memory. We could avoid this only if our specious present

were the whole of time, instead of being the curiously brief interval which it is.

Mr. Broad expounds four main theories in regard to memory.¹ We must state them in a greatly simplified form. The first two theories are varieties of what may be called the Trace-Theory. The second two theories are varieties of what may be called the Mnemic-Causation-Theory. Mr. Broad himself is inclined to support the former type, while the latter type finds an advocate in Mr. Russell. I will use actual examples in preference to Mr. Broad's letters, and I hope they will not misrepresent his meaning. Let us suppose that I have seen the Elgin Marbles in the British Museum. Some time later I hear the word 'Elgin,' and immediately I remember the Marbles. For the sake of clearness it must be supposed that I have seen the Marbles only once.

On the first theory my original experience has set up what is called a trace, which may be either mental or physical. This is 'excited' by the stimulus of the word 'Elgin,' and produces awareness of a memory-image which resembles the past event.

The second theory varies from the first only in this respect, that what is produced by means of the trace and the stimulus is not awareness of a memory-image, but direct awareness of the past event.

In the third theory we give up traces, and substitute mnemic causation. This is a special kind of causation in which an event which is past actually has an effect in the present without producing (as in ordinary causation) a series of intermediate causes and effects to fill up the interval between the original cause and its present effect. The past event together with the present stimulus of the word 'Elgin' produces an awareness of a memory-image which in fact resembles the past event and is accompanied by a 'feeling of familiarity'. This is Mr. Russell's theory.

The fourth theory is not apparently held by anybody. It differs from the third theory in this, that the past event and the present stimulus, instead of producing awareness of the memory-image, produce direct awareness of the past event.

It is fortunately unnecessary for us to discuss the difficulties of these theories in detail. The theories, however, have at least this in common that they appear to regard remembering as possible on the supposition that mind can be simply a series of mental events in interrelation. Neither of them

¹ *The Mind and its Place in Nature*, p. 444 ff.

requires that the same subject-self should be present in all its knowings.

The four theories have, I think, one other thing in common. The very fact of their formulation suggests to us how very limited our knowledge of memory really is. We know so little about memory that we must be grateful for any theory, in the hope that its formulation may be a stage on the way to something better; but it is quite clear that the present theories offer us little more than ingenious guess-work. The last two theories depend on the invention of an entirely new kind of causation by which a past event is enabled to act directly on the present, apparently without any intermediary to connect the two. This is frankly miraculous. The trace-theory is certainly less miraculous, and Mr. Broad is to be congratulated on his careful attempt to render it plausible. Even so it involves a great many highly unsatisfactory hypotheses. It means for example that every event which we might remember leaves some sort of trace on subsequent mental events which is passed on from one total state of mind to another, as a scar remains in a body although the bodily cells may be continually changing. This may sound possible in regard to one event, but the complication involved in order to deal with all events is a little overpowering. Furthermore it is not suggested that these mental traces can themselves be traced. We cannot, if I understand rightly, verify their existence in any way. They are purely hypothetical qualities of, or relations between, mental events which are supposed to be passed continuously from one total state of mind to another. Furthermore, as there are times, for example in sleep, when there would seem to be no mental events to carry these traces, we have to postulate in addition a series of literally unconscious mental events to fill up the gaps. The utmost that can be said for this theory—perhaps it is all that Mr. Broad would claim—is that it is just not impossible; and that cannot always be said of similar theories. I gather that if it were not for certain discoveries due to psychical research, Mr. Broad would have no hesitation in supposing the traces to be really physical, to be traces, that is to say, in the brain, and not in mental events. I certainly agree that the theory of brain-traces is a more satisfactory theory, but it also is purely hypothetical, and since it raises the great question of the relation between body and mind I do not propose to discuss it here, beyond saying that I cannot accept it as a satisfactory explanation of memory.

It is obvious enough that we have in all this speculation no core of certainty, or even of probability, which should force

us to modify our original argument, but one or two points may be made bearing more directly on the problem.

In the first place the theories which offer us a so called memory-image do not deal with memory at all. The image is present, and what we remember must be past. It is not enough even that the image should *as a matter of fact* be like a past event. Before we can be said to have memory we must *know*—and know by something that is not mere inference—that the present image is like the past event. That means clearly that we must in some sense know the past event, and in fact it means that we must remember the past event. To substitute present images for memory is a quite hopeless proceeding.

Attempts are no doubt made to get over this difficulty by ascribing to the image what is called 'familiarity,' and by struggling to derive from familiarity the notion of pastness. Mr. Broad suggests two ways in which this might be done, and recognises, with his usual candour, that at least one, and perhaps both, of these fall short of success. Personally I should say that each of them was a manifest failure, and I am quite certain that 'familiarity' will not bear the weight that is put on it. This contention, however, is really not essential, since, even if we *inferred* the existence of a past event like the present image on the ground that the present image 'felt familiar,' it is obvious that whatever we had we should not have memory; for memory is distinct from inference. And indeed the very inference itself rests upon our memory of a discovered resemblance between images felt as familiar and the past events which they resembled.

The really important case for our purposes is the case where we are supposed to cognise directly, or in other words to remember (and not to infer), the past event. I cannot attempt to follow Mr. Broad's discussion of this, especially as he multiplies distinctions between the 'objective constituent,' 'the epistemological object,' and 'the ontological object,' which may be valuable as a criticism of naïve realism, but appear to me to render the problem of knowledge insoluble. Recognising, as we must, the difficult duty laid upon us of explaining our own theory of what is meant by remembering a past event, we are at present concerned with a much more limited subject, namely with the relation between the identity or unity of the knowing self and the fact—for we must presume it to be a fact—of memory.

Now what is it that we remember? There are two possibilities before us. One is, to recur to the example we have just given, that we remember the Elgin Marbles. The

other is that we remember seeing the Elgin Marbles. I must deal with this quite summarily, and I will assume without discussion that what we remember is seeing the Elgin Marbles. I do not mean that we are necessarily thinking about our seeing as distinct from what we saw—probably the exact contrary is often the case. Mr. Broad seems to think we might have direct knowledge of a past event which we had never seen, but clearly if we had such knowledge it would not be memory. I cannot remember something which somebody else saw. I may see the Pyramids, and I may remember the Pyramids that I saw. I may also see the Pyramids that Julius Cæsar saw, and if I have seen them I can remember them, but I cannot remember what Julius Cæsar saw, because in memory it is essential that the person who sees and the person who remembers should be the same person.

Here we come once more to the crux of the whole question. In order to remember my seeing, or what I saw, I must be the same in both the act of seeing and the act of remembering. A collection of separate momentary selves, however closely related by miraculous causations or hypothetical traces, could not remember anything. The only thing that can remember is an identical subject-self. I think it may fairly be argued that this is the claim which is actually made by what Mr. Broad would call the 'memory situation,' and that is itself a fact which ought not to be overlooked. The memory situation does not claim this in the Pickwickian sense that it claims to be the last of a closely interrelated chain of mental events. What it claims is that I now remember what I then saw, and that these two 'I's' are one and the same I. But I am not resting my case on the unsophisticated claims of an untutored consciousness. I am suggesting rather that there could not be a memory situation at all unless this claim were sound.

No doubt, if we are prepared to let our fancy run riot, it is theoretically conceivable that mental traces and mnemonic causation might produce a mental event which consisted in thinking, or even in knowing directly, that it had seen this thing before; just as it is theoretically conceivable that some one might be born into the world with a ready-made memory of a past life which he had never lived. I do not, however, propose to consider such fantastic suppositions seriously, and I conclude that in the whole of our discussion of memory we have discovered nothing which is in the least degree calculated to undermine our original contention.

V.

We come now to the last, and in a sense the crucial, question of the Unity of the Self, or the Unity of the Mind. Mr. Broad devotes a whole chapter to this subject, which is headed by the unlucky number XIII. In this chapter he elaborates, with his customary acuteness, a series of subtle distinctions which I cannot here undertake to examine and with which I cannot profess to agree. My chief criticism is that he appears to be almost entirely concerned with the nature of mind as an apprehended object, and hardly at all with the nature of mind as an apprehending subject. That is to say, taking mind as a series of mental events (some of which, namely the cognitive, have an external reference), he asks himself what characteristic these must have, if they are to be known as a unity. This he discusses mainly on the analogy of physical substances and interrelated points in space. Needless to say, he is far too careful a thinker not to recognise that there is a real difference between the problem of minds and the problem of physical substances, but my complaint is that he never really faces the question of how great this difference is. It may be that he is meditating another work to be entitled 'The Mind and its Place out of Nature,' or even 'Nature and its Place in the Mind'. I hope that it may be so, but I confess I see little sign of it. It looks as if he were almost unaware of the existence of any further problem than the limited one of the unity necessary for the self to be an object. This problem he deals with in isolation, although in isolation its solution is of secondary importance for any philosophy of mind.

It must not be thought that Mr. Broad is to be regarded as an enemy of what he calls the Pure Ego theory. He admits the possibility of a Pure Ego theory, both in connexion with memory and in connexion with the unity of the mind. All he maintains is that such a thing is not necessary in either case, and on the whole he is inclined to reject it in the light of certain facts of abnormal and supernormal psychology. But the problem of the Pure Ego is not for him the problem of knowledge. It is merely the problem whether in that series of mental states which for him constitute a mind we have reason to believe there is present a 'numerically identical substantial constituent common to all our successive total states.'¹

As regards his own problem he adopts an attitude of judicial detachment. He assumes that a Pure Ego must be a substantive which is a particular existent. A substantive is 'the

¹ *The Mind and its Place in Nature*, p. 606.

kind of entity which can be a logical subject of a proposition, but cannot play any other part in a proposition'.¹ Substantives however need not exist, that is to say exist in time. There are certain 'abstracta' which are not existents, as *e.g.*, 'qualities, relations, numbers, and also propositions and classes if there be such entities';² and of these 'abstracta' propositions, although they do not 'exist,' are none the less substantives. The Pure Ego, if it is at all, must be an existent substantive, a substantive which exists, or appears to exist, in time.

From this it is at once obvious that he is concerned with a difference in objects *qua* objects. He never even raises the question whether a Pure Ego might not be some kind of reality which differs essentially both from his existent substantives and from his abstracta. It is for example the subject of a quite unique kind of judgement—the judgement 'I think'. It is not merely a logical subject, but a cognitive subject. Furthermore, as Plato suggested, it appears in some ways to be more akin in its nature to the eternal and timeless Forms than it is to the changing events in the phenomenal world. We cannot say simply that it exists in time. We must say *instead*, or at the very least we must say *also*, that all time exists for it. I am not prepared to say here that it is a timeless reality, for I am afraid of committing myself at the outset to what may in the end appear an abstraction. But I do say that here is an aspect of the self which constitutes a problem, and that it is a problem which Mr. Broad entirely ignores. If my contention is sound, it will follow that Mr. Broad's discussion is in the main irrelevant to the only question with which we are concerned, though much of what he says is valuable in clearing away customary misconceptions. He recognises that ordinary common-sense does seem to claim something like the existence of a Pure Ego, and he recognises also that such a Pure Ego might exist, even although it cannot be observed. On the other hand he maintains that the unity of the self might perfectly well lie in the interrelations of mental events with one another. His own theory appears to be, however, that there is in every mind some sort of central event which is a constituent of all its successive total states. This central event is, however, not a Pure Ego, but merely 'a mass of bodily feeling'.

Now as it would never occur to me to suggest that a Pure Ego was a constituent—whatever that may be—of all the successive total states of a mind, I am compelled definitely to

¹ *Op. cit.*, p. 558.

² *Op. cit.*, p. 19.

regard this discussion as irrelevant. It is a problem about mind considered as known and not considered as knowing.

There are indeed times when Mr. Broad does seem to approach the question as a question of knowing, and not merely as a question of the known. He suggests, for example,¹ that the 'characteristic of being "intuitively apprehended" is a relational characteristic; i.e., that it consists in the establishment of a certain asymmetrical relation R between the sensum and something else.' This something else turns out to be² 'the mass of general bodily feeling.' In talking later of introspection³ he speaks as if we were aware of, for example, toothache (which he regards as an objective constituent of the situation), and of bodily feeling (which he regards as a subjective constituent of the situation), and lastly of the relation between them. If Mr. Broad really regards sensing, or any kind of knowing, as a relation, however unique, between an objective constituent and a mass of bodily feeling, I can only gasp with wonder and dismay. I am totally unable to understand why bodily feeling should be thought of as more subjective than toothache, which appears to me to be only an unusually acute kind of bodily feeling. And I cannot admit for a moment that any kind of knowing is merely a relation between two objects known.

Let us avert our eyes from this theory even as a possibility, and let us attribute it to a stupid misunderstanding of our own. Mr. Broad, however, approaches the question of knowledge again at the end of his chapter on the Unity of Mind. He says then, in all innocence, that he does not think it has been maintained that cognition as such is impossible without a Pure Ego.⁴ I can only reply that I do not know from what philosophers Mr. Broad has learned the theory of the Pure Ego, but that evidently his Pure Ego has no relation to the Transcendental Unity of Apperception which was expounded by Immanuel Kant. With this inauspicious introduction Mr. Broad turns again to the question of memory, and offers us his final conclusion. The necessity for a Pure Ego, he asserts, must depend on the fact that in memory I claim to recognise a past event as having been a state of *myself*. On the theory of the Pure Ego this means that I recognise the subjective constituent of the past event to be 'numerically the same Pure Ego as that which is the subjective constituent of my present act of remembering'. On other theories it means that I recognise the past event to stand 'in certain relations

¹ *The Mind and its Place in Nature*, p. 210.

² *Op. cit.*, p. 308.

³ *Op. cit.*, p. 215.

⁴ *Op. cit.*, p. 604.

of qualitative resemblance, causal connexion, and identity or continuity of mental position, with my present act of remembering, and with other intermediate states which I can remember'. He concludes that the one *fact* can be recognised as easily as the other, and he cannot see 'that the power of recognising the second kind of fact requires the presence of a numerically identical substantial constituent common to all our successive total states'.

From our point of view further comment on this is needless. Mr. Broad is looking for some unique constituent which is to be a part of each of the past total states, and it is not surprising that he cannot find it. Moreover we can certainly recognise a kind of unity in a series of known events by reason of their interrelations as well as by means of a common recognisable constituent within them. On his own suppositions his procedure is wholly rational, and his conclusion fundamentally just. But throughout he is considering the self merely as something known, the self as one object among other objects. The real question with which he has to deal is the question of the self as subject, and the doctrine he has to refute is that one and the same self must be, not a constituent of the past states, but rather a knower which is never a constituent, and that apart from this we could never know or remember or recognise or think anything at all.

The difficulty in short is not that Mr. Broad's self could not be recognised. It is that it could not recognise anything, and consequently it could not recognise itself.

Perhaps I may be allowed in conclusion to put the matter a little more pictorially in order to make my point clear. Mr. Broad himself protests against the view that the mind resembles a society of minds. But it appears to me that he himself is reducing every mind to a society of momentary minds, and moreover a society of momentary minds in which the parent must die before its child is born. I fully recognise that such a society might be recognised as a unity by a mind *which was thinking about it*—which is what Mr. Broad seems to maintain. What I deny is that it itself could either remember or think or have any kind of cognition, or indeed be a mind at all. It might have the unity necessary to be an object of thought, but it could not have the unity necessary to be a subject of thinking.

Let me put this point with even greater crudity and bluntness. If there were five men out of earshot of one another, and I said to each of them one word of the sentence 'Your house is on fire,' the sentence could be known by no one but myself. This remains true no matter how closely

the mental events of hearing each word might be interrelated, and no matter how many qualitative resemblances and causal connexions these mental events might have. It remains true, even if we suppose in addition that the mass of bodily feeling of each separate individual is in all respects the same. The essential condition for knowing the sentence is that one and the same self should hear all the sounds, and should remember what it has heard. And it appears to me—I should be glad to be corrected in this—that this is precisely the condition which the modern doctrines ignore.

I am far from suggesting that my own doctrine is an easy one, and still further from suggesting that if it be accepted all the difficulties about the nature of memory will disappear. It is the beginning of an investigation and not the end, and nothing could be more fatal to the advance of philosophy than the belief that by the assumption of an identical knowing self all our difficulties would evaporate. Rather than believe that, I would range myself on the side of Mr. Broad, in the hope that difficult empirical investigations, even if they rested on false philosophical assumptions, might in the end enable us to advance into the light of day. And it is well for critics to remember with diffidence how much more easy it is to criticise than to create in philosophy, as in the other activities of the human spirit. All I claim is that I have set forth a certain minimum of truth, and that that truth has not been refuted, and indeed has not been really faced, by the theories I have considered.

IV.—THE BASIS OF KNOWLEDGE IN DESCARTES (I).

BY A. K. STOUT.

IN the Meditations, Descartes, pursuing the method of universal doubt, reaches three main grounds of certainty, the relation between which has been left obscure both by himself and by his critics and exponents. These are (1) the intuition of the necessity of his own existence, stated in the rather misleading form '*Cogito ergo sum*'; (2) the general rule that all that is clearly and distinctly perceived is true; and (3) the veracity of God. The purpose of this paper is to try to show how these three are related to each other, and to assign to each its relative importance.

The most straightforward account of the third Meditation so far as it bears on this question is as follows: "I find the existence of myself as a thinking being an indubitable fact. It is indubitable only because I clearly and distinctly perceive it; that is the ground of its certainty and must equally be a sufficient ground of the certainty of other judgments. I may therefore take it as a general rule that what is clearly and distinctly perceived is true.

"But here a speculative doubt occurs to me. There may be an all-powerful Being who has created me such that I am deceived even when my perception is clear and distinct. Until, therefore, I have proved that if God exists He is not a deceiver I am not justified in my certainty even when I am in fact clearly and distinctly perceiving something (although *so long as I am doing so* I cannot help being certain and cannot entertain even the most speculative doubt) nor, *a fortiori*, am I justified in maintaining as a general rule that all that I clearly and distinctly perceive is true.

"But when I turn to consider the nature of an all-powerful and infinite Being, I clearly and distinctly perceive that He must exist and that He cannot deceive me. My doubt is thus wholly overcome."

It seems, then, that the general rule 'all that is clearly and

distinctly perceived is true,' founded on the single instance of the *Cogito* and confirmed by the appeal to the veracity of God, can be applied as an infallible test of the truth of propositions whose clearness and distinctness has been independently discovered. It is as if each time we clearly and distinctly perceived something we could argue "All that I clearly and distinctly perceive is true; I am now clearly and distinctly perceiving A; therefore A is true".

The general rule, it appears, is reached from the examination of a single instance—namely, the self-evident truth that I am a thinking thing. The passage is very familiar and perhaps for that very reason its difficulties are usually overlooked. "I am certain," says Descartes,¹ "that I am a thinking thing; but do I not therefore likewise know what is required to render me certain of a truth? In this first knowledge there is nothing that gives me assurance of its truth except the clear and distinct perception of what I affirm, which would not indeed be sufficient to give me the assurance that what I say is true, if it could ever happen that anything I thus clearly and distinctly perceived should prove false; and accordingly it seems to me that I may now take it as a general rule that all that I very clearly and distinctly perceive is true."

Logically this argument involves a circle. Clearness and distinctness as a universal test of truth is derived from the *Cogito ergo sum*, and the truth of the *Cogito ergo sum* is derived from its clearness and distinctness. "I am certain of the truth of A because of certain marks BC (which I call clearness and distinctness). BC can only guarantee the truth of the judgment A if they guarantee the truth of the judgments in which they are present. But A is true. Therefore BC are universal signs of truth." Obviously you must prove BC to be a universal guarantee of truth before you know A to be true—that is if A really depends for its truth on BC. But this dependence is just what Descartes did not really mean and should not have implied. He is at fault because he suggests that the judgment 'I think therefore I exist' taken as a whole, is inferred from another judgment "I clearly perceive that 'I think therefore I exist'"; or, in other words, that in apprehending the existence of the self as a thinking thing I am arguing 'My perception of this is clear and distinct and therefore true'.

It must be admitted that Descartes' words imply this; but it is not (I would urge) what he intended to say. The

¹ Med. III. The translation is Veitch's.

Cogito ergo sum, he tells us explicitly,¹ is itself an intuition, not an inference. It is 'a simple act of mental vision,' 'known *per se*' and 'not deduced by a syllogism'; the being, that is, is not inferred from the thinking. Nor did he mean to argue that intuitions are dependent for their truth on the validity of any general rule, even if the rule be itself intuited. In spite of his language in the passage quoted (which I think must be taken as in some measure tentative and provisional), he holds that what I perceive is self-evident and while I am perceiving it I cannot doubt its truth. I may expect to find the same general conditions present in all truths that appear to me self-evident, and, having found them, I may give them the names "clearness and distinctness"; and they may then serve me as a guide in trying to discover self-evident propositions. But these conditions can never be the guarantee of the truth of the self-evident propositions they condition. 'To perceive clearly and distinctly' in the passage quoted simply means 'to perceive in such a way that I cannot doubt the truth of my perception,' and the general rule amounts to no more than "what I cannot doubt is true". But when I am attending to a proposition which I cannot doubt I do not argue to convince myself of its truth: "What I cannot doubt is true; I cannot doubt this, therefore it is true". Such a use of the general rule is futile because it is superfluous. We shall see later, however, that there is another and more legitimate use which can be made of it.

Passages in the fifth Meditation bear out the contention that Descartes does not maintain consistently that when I clearly and distinctly perceive something I argue from its clearness and distinctness to its truth. "And even if I had not demonstrated it [*i.e.*, that all clear and distinct perceptions are true] the nature of my mind is certainly such that none the less I could not help assenting to them, at least as long as I am clearly perceiving them."² And again "But, indeed, whatever mode of proof I adopt in the end, it always comes to this, that only those things which I clearly and distinctly perceive entirely convince me."³ The ultimate fact is, then, that there are certain truths which I grasp intuitively and cannot help believing; and their logical nature I call 'clear and distinct'. The passage in the third

¹ Reply to Objections II., *Thirdly*. Adam and Tannery's Edition of the complete works of Descartes [hereafter referred to as A. and T.], vol. vii., p. 140

² Med. V., A. and T., vol. vii., p. 65, l. 6.

³ *Loc. cit.*, p. 68, l. 21.

Meditation on this view expresses only a stage in Descartes' thought, a stage to be superseded by a more adequate explanation.

Why, then, does Descartes formulate the general rule at all? What is the use of it, since it cannot be the test of truth of those indubitable propositions from which apparently it is itself derived? The answer is that it must be established to overcome a doubt to which every clear and distinct perception is liable, not when we are attending to it, but when we reflect upon the general conditions of our knowledge. The doubt is that the world of which I am part may be caused by an infinitely powerful demon who is constantly endeavouring to deceive me; the one truth that cannot be doubted is that of my own existence, for even if I am deceived I must exist; indeed, the fact that I am deceived is itself proof of my existence.¹

It is perhaps because the certainty of self-consciousness differs in this way from other intuitions that Descartes tries to derive the general rule from it alone. But although it is not itself affected by the hypothesis of a deceiver it affords no ground for defending other intuitions against that hypothesis. A general reason must be found for trusting the certainty which clear and distinct perception carries with it; in other words, it must be proved that 'all that I clearly and distinctly perceive is true,' and if the argument is not to be circular, either this proof must depend for its validity on something other than its own clearness and distinctness, or else its clearness and distinctness must differ from that of other perceptions in such a way that it logically justifies itself against all doubts. Evidently it is no use trying to infer the general rule from the particular instances of clear and distinct perception, still less from one of them alone—the *Cogito ergo sum*. Nor in fact does Descartes intend this, in spite of the passage at the beginning of Meditation III.

Descartes' argument is as follows.² Although I cannot help believing the truth of what I am actually perceiving clearly and distinctly, yet, unless I can prove that there does not exist an all-powerful Being who wills to deceive me, I am justified in doubting the truth of a conclusion which I remember to have drawn by a series of steps, each of which was clear and distinct, from clear and distinct premises, provided that I am no longer attending in detail to the steps

¹ Cf. Med. II., A. and T., vii., p. 25, ll. 5-10; p. 28, l. 30—p. 29, l. 3; Med. III., p. 36, ll. 12-17.

² Med. V., A. and T., vii., p. 69, l. 16—p. 70, l. 9; and Reply to Obj. II., Thirdly, A. and T., vii., p. 140.

of the argument. For instance, I am certain that the angles of a triangle are equal to two right angles, so long as I am attending to the geometrical proof; but when I have ceased to attend to it, however well I remember that I did perceive its truth most clearly, I may still be in doubt, unless I have the guarantee of God's veracity.¹ While I was attending to the proof I was incapable of doubting; now I can doubt, and my doubt cannot be overthrown unless I can prove that if there be an all-powerful Being He cannot deceive me. If I can go further and prove that there does exist an all-powerful Being who cannot deceive me, I can no longer have this or any other ground for doubting that what I clearly and distinctly perceive is true. It is from God's nature alone that the general rule can be derived.

It is not generally noticed that this argument admits of two interpretations. (1) It may be taken to mean that apart from the existence of a veracious God what I clearly and distinctly perceive may be false, even though I cannot help believing it to be true so long as I am perceiving it; it is only on reflexion that this doubt can occur to me, and it is only by proving the existence of a God who cannot deceive that I can dispel it once for all. On this view God is needed to guarantee the truth of the general principle that what I clearly and distinctly perceive is true; but the principle is for use only on reflexion, and might take the form 'What I *have* clearly and distinctly perceived is true' (2) On the other view, Descartes is abandoning the position that the knowledge of God is necessary for assuring us that we were not mistaken in believing the truth of what we clearly and distinctly perceived to be true, and is maintaining that *if* I clearly and distinctly perceived something it was (and is) true—God or no God—nor can subsequent reflexion cast the shadow of a doubt on its truth. What part, then, does the knowledge of God play? It is needed to guarantee *the accuracy of my memory*, not the principle that what I have clearly and distinctly perceived is true. The doubt to be dispelled is not "Can I be deceived when I clearly and distinctly perceive something?" but "can I be deceived in my belief that the steps by which I reached a certain conclusion—a conclusion now before my mind, but divorced from the argument which led to it—were actually clear and distinct?" (It should be noted that the doubt in this form is better met by a direct appeal to God's veracity than by an appeal to a rule derived from God's veracity. The formula

¹ Med. V., A. and T., p. 69, l. 26—p. 70, l. 4.

"God cannot deceive us in what appears most evident to us" can be extended to cover not only clear and distinct perception but some instances of memory also.)

It is hard to say whether Descartes ever explicitly distinguished these two views, but it is very important for an understanding of his position against his critics that they should be distinguished. The difference between them may most easily be shown in their bearing on the criticism that in appealing to the proof of God's existence Descartes was arguing in a circle. The first position, as we have stated it, seems clearly open to that criticism; the second can be defended against it, though Descartes does not formulate it with sufficient precision to meet the charge. His language suggests that when he is not interested in meeting this criticism he is assuming the first position, but in meeting it he has (perhaps without realising the change) passed over to the second. I take the second to be a refuge into which he is driven in his attempt to avoid an otherwise formidable criticism of the first. Let us take them in succession.

(1) I read the account in the *Meditations* as follows.¹ While I am actually perceiving something clearly and distinctly I cannot entertain even the most speculative doubt of its truth. But when I am not perceiving it I can find reason to believe that I may have been deceived when I was perceiving it, however strongly I remember myself to have been convinced at the time. This doubt cannot be overthrown unless I can prove that if an all-powerful Being exists He is not a deceiver. Thus, if I do not believe in a veracious God, I may doubt a conclusion which I remember to have drawn by a clear and distinct process of reasoning from premises whose truth I clearly and distinctly perceived, even though I do not doubt the accuracy of my memory. The same doubt applies to simple self-evident 'truths' which do not involve a reasoning process; but though it is valid for these in general—in the form 'I may be deceived in whatever I clearly and distinctly perceive'—the attempt to illustrate its validity by applying it to any one in particular defeats itself. For in remembering a self-evident 'truth' I must re-think it; and

¹ The important passage for this doctrine is *Med. V., A. and T., vii., p. 69, l. 16—p. 70, l. 9*, which ends thus: "Possum enim mihi persuadere me talem a natura factum esse ut interdum in iis fallar quae me puto quam evidentissime percipere [*N.B.* not 'percepisse'] cum praesertim meminerim me saepe multa pro veris et certis habuisse, quae postmodum aliis rationibus adductus falsa esse judicavi," *cf. Med. III., A. and T., vii., p. 35, l. 30—p. 36, l. 12*, and *Reply to Obj. VI., A. and T., vii. p. 428, ll. 1-9. Obj. II., Thirdly (A. and T., p. 124)* shows that some at least of Descartes' critics interpreted him as above.

while I am thinking it I cannot doubt it.¹ Consequently it is not possible to say (*e.g.*) "I remember that I clearly and distinctly perceived that I think, hence I am, but in so believing I may well have been deceived"; nor does Descartes attempt to do so,² but confines himself to the memory of conclusions whose proofs are no longer attended to in detail, but are remembered to have been clear and distinct.

Thus Descartes has in fact invoked God to prove the truth of the same general rule with which he started—that all that is clearly and distinctly perceived is true. But its use is now to guarantee that all that I have clearly and distinctly perceived was (and of course still is) true; it is to free me from my doubts when I am not clearly and distinctly perceiving for when I am doing so I cannot doubt.

There is a point which Descartes does not settle. Granted that an all-powerful demon may deceive me, what precise form might the deception take? What sort of error does he lead me to make? It is perhaps worth while to put forward tentatively an answer suggested by some crucial passages in the *Meditations*. The judgments which appear to me most evident are mathematical judgments. While I am attending to the evidence I cannot doubt the truth of the judgment; in particular, I do not consider the question whether a corporeal world exists at all to which my judgments apply. Mathematics does not raise the question, but if a corporeal world did not exist mathematics would simply be an elaborate deception, because 'corporeal nature serves as the object of mathematical demonstrations'.³ In the first Meditation Descartes distinguishes between physics, astronomy, medicine, etc., on the one hand, and arithmetic and geometry on the other; the former are doubtful compared with the latter 'because they depend on a consideration of composite objects,' while the latter 'treat of the most simple and most general things' and 'are little concerned' whether they exist in nature or not'. I take this to mean that Physics involves observation and

¹ Cf. Reply to Obj. II., A. and T., vii., pp. 145-146.

² It is true that in the first Meditation he asks: "How do I know that I am not also deceived each time I add together two and three, or number the sides of a square, or form some judgment still more simple, if more simple indeed can be imagined?" (A. and T., vii., p. 21). But he takes care not to say 'in judging that two and three are five' or 'that a square has four sides'. He refers to the judgments without actually making them.

³ Med. V., French version, last sentence.

⁴ Latin: 'parum curant'; French: 'sans se mettre beaucoup en peine'. Med. I., A. and T., vii., p. 20, ll. 26-27 and ix., p. 16.

experiment and is consequently dependent on sense-perception. In Physics we frequently seek to prove the existence of this or that particular piece of corporeal nature or to show whether matter exists or can exist in this or that form. Mathematics is satisfied if corporeal nature (which for Descartes is the same thing as space)¹ exists at all. That is why Mathematics as compared with Physics is said not to trouble itself much about existence. The geometrician does not ask whether extension exists, but the philosopher does; and on such a supposition as that of the all-powerful deceiver he may reasonably doubt its existence. Immediately after the assertion of the relative certainty of Mathematics Descartes puts forward this hypothesis to diminish that certainty. God may have "arranged that there should be neither earth nor sky nor any extended thing, nor figure, nor magnitude, nor place, providing at the same time, however, for the rise in me of the perception of all these objects and the persuasion that these do not exist otherwise than as I perceive them".² It is tempting to suppose that at the back of Descartes' mind was the thought that if I were deceived in judgments about extension it could only be because extension does not exist at all; and, speaking generally, that if I were deceived in judgments about what is clear and distinct it could only be because the content of my ideas had no basis in reality—they would be inapplicable, not confused.³ It might be objected that only the possible and not the actual existence of extension is necessary for Mathematics. (Certainly the possible existence of geometrical figures would be sufficient, but since these are modes of extension they depend on the actual or possible existence of extension.) This objection can be met as follows. What is clear and distinct *can* exist, but only if there is an all-powerful Being who can cause it to do so. Now, a deceiving demon cannot be all-powerful, for the same grounds which would prove him to be all-powerful would prove that he cannot be a deceiver.⁴ Therefore until the existence of a veracious God is established we do not know even that extension *can* exist. The very possibility of the existence of material things 'in so far as they constitute the object of pure mathematics'

¹ Hence I use the word 'extension' rather than 'space'.

² *Ibid.*, French Version (quoted from Veitch's translation).

³ We shall return to this principle at the end of the paper, to show how it can be used to refute a specific charge of circularity in the causal argument for the existence of God.

⁴ *Cf. Med. III., A. and T., p. 52, and Med. IV., p. 53.*

depends on the power of God.¹ If there were no God and Mathematics depended on the assumption that extension can exist, then Mathematics would be fallacious in virtue of that assumption. We should be deceived in believing that because the idea of extension is clear and distinct, therefore extension can exist; for God is needed to constitute even this possibility. Would the suggestion which we have made for judgments about extension apply also to judgments about number? Not necessarily, because number is independent of extension—ideas, for instance, can be numbered. But this is a question Descartes never discusses. He seems to class number, figure, and extension together, and might well have held that if there is no extension there can be no Arithmetic.

To return to our main argument. The important point to note in the position which we have now reached is that unless I can prove the existence of a God who is not a deceiver I may reasonably doubt the truth of what I have clearly and distinctly perceived; it is not merely that I may doubt whether I am now rightly remembering the conclusion I then reached; even if I assume that I am rightly remembering it, and that I did clearly and distinctly deduce it from clearly and distinctly perceived premises, yet I am justified in doubting its truth. Only when I have proved the existence of a veracious God shall I be able to say: "Whenever I clearly and distinctly perceive anything (or have clearly and distinctly perceived anything, or shall do so in the future) not only is it a fact that while so doing I am certain of the truth of what I am perceiving, but also I am absolutely justified in my certainty, and no speculative doubt cast upon it afterwards can overthrow it".

The objection put to Descartes by his critics was that he was arguing in a circle.² Their formulation of it presupposes (a) that Descartes' argument in the third Meditation, involving the use of the general rule as a ground from which the truth of each separate perception is inferred, is his last word; and (b) that consequently the veracity of God is derived from the general rule, and is not a self-evident intuition from which the general rule may itself be derived.³ Descartes is supposed to argue "I cannot know anything until I know that a veracious God exists. His existence I prove thus. From the clearly and distinctly perceived truth that 'I think hence

¹ Med. VI. *ad init.*

² Obj. II., *Thirdly*, A. and T., vii., pp. 124-125.

³ In Reply to Obj. I., A. and T., vii., pp. 115-116, Descartes explicitly refers to the rule as the major premise in the argument for God's existence.

I am' I draw the rule that all that I clearly and distinctly perceive is true; now, I clearly and distinctly perceive that God necessarily exists and that it belongs to his nature not to be a deceiver." To which the critic replies: "You say that you cannot know anything until you know that God exists; but as you had not proved His existence before you became certain of your own existence and of the truth of the general rule which follows from that certainty, that rule was not really certain, and the proof of God's existence, which depends on it, is not valid". The circularity involved in the argument so stated is too obvious to escape a mind of much less acuteness than Descartes'. We can partially acquit him by rejecting on his behalf the use of the general rule as a basis of inference. But even so the criticism will still hold, though not in exactly the same form. For after that rejection every clear and distinct perception has an equal claim to truth on its own behalf, and does not owe that claim to a rule drawn from the self-evident existence of the self. The 'all-powerful deceiver' hypothesis casts doubt on all alike, and it is left to the clear and distinct perception of God, which the speculative doubt brings to the prominent position previously occupied by the perception of the self, to guarantee against that hypothesis its own truth and so the truth of all the rest. It is here that the imputation of circular reasoning comes in, and we must formulate it in terms wide enough to apply to the new position.

It is to guarantee the validity of all clear and distinct perception that the knowledge of the existence of God is invoked, yet this supposed knowledge (or belief) itself depends for its certainty only upon its clearness and distinctness; and so the proof of God's existence already assumes the validity of that principle which it is called upon to guarantee. To put it in another way, the clear and distinct perception of the existence of God is no more (and no less) certain than any other clear and distinct perception, and whatever doubt affects them must equally affect it. I cannot rid myself of my doubt, because that doubt infects the only means by which I could dispel it.

(2) This criticism forced Descartes into a new position (though perhaps he did not himself realise the change). He could not (he assumed) meet it unless he ceased to maintain that the hypothesis of an all-powerful deceiver could undermine the validity of clear and distinct perception. He had now to hold not only that when we are clearly and distinctly perceiving something we cannot doubt its truth, but that we are justified in our certainty, and that no doubt can be validly

entertained against it when we are no longer clearly and distinctly perceiving it. What is clearly and distinctly perceived is true and is known to be true when so perceived and does not become false when it has ceased to be so perceived. I have now therefore to accept as true, even against the hypothesis of an all-powerful deceiver, and independently of the knowledge of God, the general rule that what I have clearly and distinctly perceived is true; this rule, however, is to be used as a support only when I am not attending to the evidence for a conclusion; for when I am so attending no doubt is possible against which it might be used.

It looks at first sight as if Descartes had been forced virtually to give up the view that all knowledge, except the *Cogito ergo sum*, depends upon the knowledge of God. Here we have an indefinite number of clearly and distinctly perceived propositions which would be true and known to be true even if there were no God. But the independence of God is not so great as it at first appears. For even if we admit that clear and distinct perception maintains itself as true against the hypothesis of an all-powerful deceiver, we may still doubt all that depends on memory. God is needed to guarantee the truth of "such conclusions as can recur in memory when I do not further attend to the reasons for which I made the judgment".¹

Suppose I remember that from certain grounds (which are not now before my mind in detail, but which I remember to have been clear and distinct) I inferred by certain steps (which I remember in the same way) a conclusion *A*. My memory leads me to believe (*a*) that I did go through a certain inferential process, (*b*) that the grounds and the several steps were clear and distinct and (*c*) that *A* as I have it now before my mind was the conclusion which I then reached. On the supposition of an all-powerful deceiver any one of these three (and, if the first, all three) or the second and the third together may be false. Memory sometimes deceives, and I need God to guarantee the truth of a different

¹ Reply to Obj. II., *Thirdly*, A. and T., vii., p. 140. Descartes is quoting Med. V., A. and T., vii., p. 6, ll. 16 ff., and apparently believes that he is only reiterating what he said there. But the doctrine of the fifth Meditation suggests the interpretation which we have given in the preceding pages—namely, that the truth of the clearly and distinctly proved conclusions themselves, not merely the accuracy of our memory that they were clearly and distinctly perceived, may be called in question—whereas the argument here will not admit of such an interpretation; for so interpreted it is obviously no answer to the criticism which evoked it.

rule—that under certain conditions I have the right to trust it.¹

Now, if God is needed to guarantee the accuracy of our memory in this way, without Him we should have no Science, or system of knowledge, at all. We should have, indeed, the power of knowing one at a time a number of self-evident truths. We should also (Descartes seems to allow) be able to know the truth of the conclusion of certain arguments while attending to premises, proof and conclusion together; thus the atheist can “know clearly that the three angles of a triangle are equal to two right angles”.²

But such isolated fragments of knowledge cannot be built into a Science or System of Knowledge without the constant aid of memory. And therefore “without God we can have Knowledge but not Science”.³

In the concluding part of this article we shall deal first with certain difficulties involved in this transference of doubt from clearness and distinctness to memory; for this purpose we shall have recourse to the *Regulae ad Directionem Ingenii*. We shall urge that the ambiguity of Descartes' position depends largely on his inability to distinguish clearly between memory in the sense of retentiveness and memory in the sense of reminiscence, and shall try to make out his case

¹ Descartes does not explicitly formulate any such rule, and quite possibly would not have accepted this formulation. But any other would be equally unsatisfactory, for reasons which will appear shortly. We must note here that Descartes' language often suggests that he is appealing to God to ratify the truth of what is remembered rather than the accuracy of our memory. But the point is that it is only the latter which can be called in question, once the certainty of clear and distinct perception is admitted. This certainty being presupposed, we cannot doubt the truth of what we remember as clearly and distinctly perceived unless we doubt the accuracy of our memory.

² Reply to Obj. II., *Thirdly*, A. and T., vii., p. 141. We must not be misled by the statement that “the atheist cannot be sure that he is not deceived in the things that seem most evident to him”. The context (it follows immediately after the statement that the atheist can know clearly the equality of the angles of a triangle to two right angles) shows that the atheist is not supposed to be able to doubt the truth of a clear and distinct judgment while he is making it, but only the accuracy of his memory when he is no longer attending to the evidence on which he based it. This interpretation is corroborated by a remark in *Princ. Phil.*, I., 13, where we are told that a mind sees reason to distrust the truth of its conclusions “where it has the remembrance of a conclusion without recollecting the order of its deduction, and is uncertain whether the author of its being has created it of a nature that is liable to be deceived even in what appears most evident”. ‘What appears most evident’ can here be nothing but the remembrance that the conclusion was clearly and distinctly proved.

Reply to Obj. II., A. and T., vii., p. 141, ll. 3 ff.

with the help of this distinction. Finally, putting aside the general rule about the truth of clear and distinct perception as not merely useless but actually an obstacle alike to Descartes and his readers in the exposition and understanding of what is fundamental in his epistemology, we shall take the lead from Spinoza and restate the part played by the appeal to God's veracity in such a way as to show it applicable, without circular argument, not merely to memory but also to each clear and distinct perception, as Descartes himself evidently intended it should be, though he was worried out of his original intention by the charge of circular reasoning.

(To be concluded.)

V.—DISCUSSION.

MATHEMATICAL PROOF.

TO THE EDITOR OF 'MIND'.

SIR,

I have been reading, with a great deal of pleasure and profit, Prof. G. H. Hardy's paper on Mathematical Proof¹; and as that is a subject to which I have devoted a great deal of thought, and on which I have worked out a far-reaching theory of my own, I hope that you will allow me to enter on a 'Discussion' upon it.

For Prof. Hardy's paper is interesting to me not only on account of the contributions to the subject from his own thoughts contained in it, but because of the admirable summary of the diverse views of modern mathematical philosophers which it puts before us. Yet in all those views, and apparently in Prof. Hardy's own views also, there is something which I miss, and which is a principal feature in my way of looking at it; while at the same time Prof. Hardy ends on a note of doubt and uncertainty which is the very last thing one would expect from a mathematician, or even a philosopher. Moreover, Prof. Hardy seems throughout his paper to be following a line of thought so nearly parallel to my own that it seems to me possible that what I miss from his paper is just the missing link between our views. It seems to me that he and the other mathematicians he quotes are all of them trying to squeeze their mathematics into the straight jacket of Aristotelian logic, by trying to reduce it to mere static pictures or at least to kinematic ones; with the result that they have to pretend to be discussing only what things ARE, instead of what they DO. And this in spite of the fact that if only mathematicians are left to themselves they are foremost among philosophers to discuss doing, instead of mere being. Prof. Hardy himself refers to "the ordinary 'operational' symbols, $\frac{d}{dx}$ " and so on; and later on, in his analysis of Hilbert's system he recognises 'rules of the game,' at least some of which prescribe what we are to DO, not what anything IS.

Of course, scholastic logic tries to get round the difficulty, by hypostatising doings as attributes of beings, or as 'relations' between them. The latter method is that adopted by Mr. Russell in

¹ Mind, No. 149, Jan. 1929, p. 1.

his earlier works (though maybe he has dropped it more or less completely in his later ones); and it leads him to an *impasse*, to get out of which he has to invent an axiom, *ad hoc*, his Axiom of Reducibility; to which, as Prof. Hardy says, "There are, however, objections . . . sufficient to prevent all other logicians from accepting it". According to Prof. Hardy's brief account of the "finitists, Brouwer and Weyl," they try to get round it, at all events in the case of arithmetic, by assuming "some peculiar sanctity about the notion of an integer which should protect it against the humiliation of further analysis . . ." and "that there is some peculiar certainty in knowledge based, in some sense, in immediate perception of a finite number of sensible things".

Further, Prof. Hardy is evidently concerned, not about the formal correctness, but about the significance, of mathematical theories about infinities or infinitesimals. So far I am entirely at one with him; only possibly I go farther than he does; farther than anyone who was not a pragmatist, perhaps, could go. In my view mathematical theorems involving infinities or infinitesimals must all be regarded either as short-hand ways of expressing approximations; or else as having no real import at all, as being what Hilbert calls 'ideal' propositions or what I call purely symbolic ones. And this whether the import we may try to give them is objective, about the things with which physical science deals, or only subjective, about fictitious concepts. But surely this ought to be obvious if only we realise that mathematics deals with doings, not mere beings, that the interesting part of mathematics lies in its operations, not in the marks on paper, or conceptual points or numbers operated on or with; or in relations between them, statically conceived, and represented by a fixed little arrow. Surely it ought to be obvious to anyone who can realise that the mathematician, in applied mathematics at all events, has a purpose before him which he hopes by his efforts to attain; whereas admittedly he can never attain 'infinity,' or ever actually go 'to the limit'. When therefore he talks about infinities, infinitesimals, or limiting cases, as he may very well do, he does so as a verbal short-hand, to express approximations *good enough for the purpose in hand*; and he may be able to show formally that it will always be theoretically possible to reach such an approximation, without actually having to do it in every case. This, I take it, is the meaning of what is called 'mathematical induction,' and of many theorems in the differential and integral calculus; but this is no objection to ideal theorems such as those of Cantor about various orders of infinities, regarded as merely symbolic; I have no desire whatever to chase Hilbert from 'the paradise which Cantor has created,' or to refrain from enjoying it myself, any more than I would care to debar us from the paradise of poetic fancy.

When Prof. Hardy goes on to discuss the views of Hilbert and his school he expresses a large measure of agreement with them, yet he hesitates to accept them in their entirety. Here, too, I am at one

with him; but comparing my own Theory of Order with Hilbert's Foundations of Geometry, or with Prof. Hardy's more complete exposition of his views, I can see where the divergence occurs. My theory is also based on 'rules for the game,' but I do not profess to base it on a 'scheme of demonstration,' even if it might be convenient, as a *memoria technica*, to embody them in such a scheme, as Prof Hardy does. The point about my rules is that they are rules which I can actually obey; the moral lies in the application of them, not in any static scheme embodying them. The point is that my theory of order, *being a symbolic theory*, as pure mathematics is supposed to be, I can lay down for it arbitrary rules, without having to give any reason for them, so far as I can actually obey them. If the rules are very simple I may be quite certain that I can always do so, by putting the matter to the test immediately. If they are more complex, however, it is possible that a new rule may clash with some rule already laid down, in some way which is not quite obvious; I may find that I can not always obey both of them. Modern mathematicians make a great deal of fuss about a supposedly new method of testing this, by giving actual illustrations from common-sense, of the application of a given set of rules. The same mathematicians very probably would cast scorn on Euclid's method of *reductio ad absurdum*, which however, is only the counterpart of this new method, and is the more logical of the two. The modern method is based upon a supposed certainty of perceptions of common sense; but it might be that in some of the illustrations cited common sense had made a blunder, or at least that its view was no more certain than that the new rule was compatible with all the old ones. Until you have mathematically analysed the common-sense illustration, how can you take it as a mathematical certainty? But I do not insist on this point, which to me seems a very minor one in any case. The point which is really significant to me is that in some cases at least I can choose sets of compatible rules, and that in some cases I do obey them; and, moreover, in some cases they do actually lead me to useful results, they do practically aid me in guiding my thoughts, and my physical acts, in ways which lead to the amelioration of my mental state. They do so even without my giving them any objectively 'real' applications; as, in Cantor's paradise, the mere fun of wandering in it may justify the time and thought expended by him, and by me in following his lead.

May I therefore suggest without offence that the reason for Prof. Hardy's hesitation about accepting Hilbert's method in its entirety is that he is hankering after rules of the game which 'establish freedom from contradiction in a domain co-extensive with mathematics,' without actually having to play the game? He wants a 'scheme of demonstration,' which 'embodies' a rule of the game; even a 'rule,' what I have called a 'formula,' is not sufficiently static for him, he wants to embody, or shall I say rather 'entomb' it, in a diagram on paper, which can be filed away in a card-index. Not that I object

to his doing this in the least; it is quite a useful thing to do, the sort of thing I have to do more and more every day, as I get older and my memory is less active. But the use of the card-index is only realised when you bring the card out again; the only use of the rule is when you actually do play the game. The static pictures, and even the workable formulas, are not really the things that matter. What matters is not what things are, but choice, will, power, action. We want to direct our attention less to the past, or to the sense presentations of the present, and more to the future, and to what we are going to do about it.

And let not mathematicians think that this applies only in philosophy, or only in metaphysics. It applies not only in physical science, but above all in mathematics and pure logic. For in these I really can do things, 'off my own bat'; and in them the importance and significance of choice and freedom of will is only obscured by their being left to go without saying. Permit me to illustrate what I mean by giving a brief outline of my own Theory of Order to bring this point out.

The basis of the whole theory is the conception of 'passing in review' units of thought, in imagination; that is, thinking of them in succession in time, discriminating between them, and recalling them in memory as I want to. But the ways in which I think of them are restricted, when I 'pass in review,' by certain 'rules of contiguity,' according to which after any one unit of thought I pass on to review only one of a certain number or group of the others, which are said to be 'contiguous' to the one under review. The point here is that these rules of contiguity are regarded as being laid down arbitrarily; '*sic volo, sic jubeo*'; I have not to justify them by any 'existence theorem'; if there is any such, it is irrelevant to my purpose. Then I pass on to the definition of a 'boundary,' dividing a whole group of units of thought into two parts, 'within' and 'without' the boundary. And thence to the definition of contiguous series of boundaries, and to pencils of them; in the series no two boundaries have any common unit, in the pencils all of them have a common intersection; geometrically we may illustrate the series by concentric spheres, or boundaries successively occupied by an india-rubber air ball while it is being blown up; the pencils are analogous to the pencils of projective geometry. Or, in two 'dimensions,' we may even better illustrate a series of contiguous boundaries by parallels of latitude, and a pencil by meridians of longitude, on the globe. We note therefore that a series of this sort is essentially a terminated group of the first order, of boundaries regarded as units of thought; whereas a pencil is essentially a complete or closed group of the first order, of such boundaries.

I go on to the 'cataloguing' of continuous groups; one step has already been taken, by conceiving boundaries in a series or pencil as themselves units of thought, which could be catalogued as such as a group of the first order, which we could pass in review as such in 'catalogue time'. Theoretically we go on by successive similar

steps to catalogue each of these boundary groups by a series or pencil of sub-boundaries in them. The boundaries, if groups at all, are said to be of an 'order' less by one than that of the groups they divide; till we come to a boundary 'of order zero,' which is not a group at all, for its units, if it has more than one, can not be passed in review. Thus in theory we might catalogue a group of order n completely, to any required degree of approximation, by a 'catalogue' the names in which were each compounded out of n names from a catalogue of simple names, which was a group of names of the first order. But here we must note the point that these series or pencils of boundaries, by which the cataloguing is effected, are not supposed to be 'given *a priori*'; but, in the first instance at all events, they are chosen by me; chosen by what I call 'quasi-arbitrary choice'; that is by choices limited, after the very beginning, by the rules of the game and by choices already made. Note the difference between this process and the mere assumption or assertion of 'axioms'; the difference lies not so much in the fact that it is a process in time, but that it involves free choice; it is dynamic, not merely static, or even kinematic.

I might have gone on to consider more particularly cataloguing by means of contiguous, (and terminated), series; but for reasons which appear later, if not at once obvious, I preferred to go on first to the cataloguing of pencils; in spite of what at first sight might appear an extra complication, namely that each boundary in a pencil is already divided into two parts by the pivot of the pencil, so that we get an apparent ambiguity if we give it a single name. This in reality is a matter of profound significance, though I can not go into that here. It must suffice to say that the effect is to yield a catalogue of pairs of ultimate units of thought of order zero, or as I call them 'zeros,' the two units in each of which are separated by a 'fundamental boundary' in the whole group; only in such an 'ordinary' catalogue the units actually belonging to the fundamental boundary itself are not catalogued. This conception will be familiar enough to mathematicians, and the way of getting over it will at once suggest itself to them; as in 'trilinear coordinates' we can have what I call 'subsidiary' catalogues, by in all $\frac{1}{2}(n+1)n$ pencils, which however are not all of them chosen independently. For many problems, however, we can get along with an ordinary catalogue; problems that is, in which the units in the fundamental boundary are not concerned. For more general problems we may find it necessary to employ the 'polynomial' catalogue.

But the subsidiary catalogues in a polynomial catalogue can not be obtained by mere quasi-arbitrary choice; for, excepting in respect of units belonging to the fundamental boundary, the choices are scarcely 'free' at all, even though the restrictions may not seem quite obvious at once. And if we can devise a method for the transmutation of an ordinary catalogue into one of the n subsidiary ones, whose fundamental boundary is any one of the other boundary

groups already chosen, we can as it were walk the ordinary catalogue about in the group, step by step, until it seems to be quite independent of the original fundamental boundary which might belong to no one of the new pencils. The device by which this may be effected is not, however, a mere quasi-arbitrary choice, but depends upon what I call 'unique collation in the catalogue of the first order'. This device was discussed by me years ago; it is reached by assuming the power of making a complete one-one collation, provided that the collations of three units with three are named. I showed then that the device was actually available if we use the theory of numbers, as also it is if we use the graphic methods of applied geometry, by 'projection' that is. Without these aids from applied mathematics it may, however, be laid down symbolically, as an arbitrary definition for use in the symbolic theory, in anticipation of our finding any real import for that theory.

But if we compare the method of cataloguing attained so far with ordinary geometry or kinematics, it is obvious that it is not 'metrical,' it is only 'projective'. The distinction lies in our having used any kind of 'unique collation,' instead of only reciprocal unique collations. For a metrical catalogue it is necessary further to lay down 'transformation systems,' that is systems which collate conjugate pairs of units which remain conjugate, not mere collations of single units. In consequence the ways in which the ordinary catalogue can be walked about in the group are enormously restricted; and instead of its walking step by step, we come to look at it as gliding about, its framework remaining all the time unchanged in shape or size. If we apply the Theory to space, this introduces the conception of a measuring rod and of a divided circle; if we apply it to space and time together, as Minkowski does, it introduces also the conception of a clock. It, however, remains a mere diagram; it does not by itself explain why a measuring rod should not alter its length, or a clock its rate, if it is moved about. It may be that in the Theory of Order I can find some transformation system or other in accordance with which I could superpose a symbolic triangle ABC on a symbolic triangle DEF, as Euclid does in the fourth proposition of his first book; and that I could also do the same things with two rigid objective triangles in space. Similar considerations would enable me to select the particular transformation of the Theory of Order which gave the best results; *i.e.*, ultimately, the one which enabled me best to guide my conduct. And in a more complicated case, introducing time as well as space measurements, I might select a set of transformation systems for a diagram of the fourth order which would best suit to predict the motions of planets; say that which I call the Newtonian system, by which Adams and Leverrier predicted that in a certain part of the sky on a certain date a planet, afterwards called Neptune, would appear. Or I might have to select a different set of transformation systems, say that of Lorentz, which Minkowski uses, in order to predict the shift of the perihelion of Mercury.

I do not wish to overburden this discussion with details which a non-mathematical reader might find it difficult to follow; but the conception of these 'transformation systems' is so essential to an understanding of wherein so-called 'mathematical proof' consists, that I am bound to say a few words about them. In the catalogue of the first order there are two main systems, the positive, in which each conjugate pair separates every other, and the negative in which no two conjugate pairs separate one another. There is also a limiting case between the two, which I call the 'zero' system. In an 'ordinary' catalogue there are n chosen pencils of boundary groups, where n is the 'order' of the whole group. In the polynomial catalogue there are $\frac{1}{2}n(n-1)$ more pencils belonging to subsidiary catalogues, which are not chosen independently, and which I therefore call determined pencils. Each of the $\frac{1}{2}(n+1)n$ pencils of the polynomial catalogue has in a metrical catalogue to have its own transformation system; and we may choose each of the n in the ordinary catalogue arbitrarily; but then we have to determine the other $\frac{1}{2}n(n-1)$ subsidiary ones accordingly; symbolic rules for doing this can be deduced. The result is that in groups of higher orders than the first we get a limited number of possible transformation systems symbolically; but in the real application to space and time this number will have to be further cut down by the prepossessions of common sense; among which one is specially noteworthy because hardly anyone has explicitly noted it. The only exception I know of is Helmholtz; but if this is what he was thinking of he did not succeed in conveying the idea clearly by his *Axiom der Monodromie*. The point of it is not that when I turn round in space I need only turn round *once* to face in the same direction as I started from; the point is that I can get round to that direction *at all*. If the transformation system were a negative one I could not do that at all; a negative transformation system is one in a terminated, and not in a complete group; and that albeit the group may metrically be called 'infinite'. The result, as applied to a space-time diagram, is to leave only four materially different systems, namely—

(1) The general positive system; in which spaces are Riemann spaces, and time is cyclic.

(2) The general negative system; in which spaces are Riemann spaces, and time is hyperbolic.

(3) The Lorentz system, as I call it; in which space is Euclidian, and time measured on a zero system, though what I call 'velo' measurements are hyperbolic. For our present purpose it is near enough to write 'velocities' for 'velos'.

(4) The Newtonian system, as I call it; in which distances, times, and velos, are all measured on the Euclidian or zero system.

Of these we may practically eliminate the first. The last I have called after Newton, though he did not himself conceive it; he was too wise a man simply to say that time 'is a fourth dimension of space'. The Newtonian system is a doubly limiting case of the

general systems; and it is a point about which even mathematicians sometimes require to be reminded, that no limiting case can be properly understood unless one understands the general cases which it limits. But in effect the Newtonian system is the system of Newtonian kinematics, as well as that of common sense. Of the remaining two, the Lorentz system is Einstein's special theory of Relativity; but the general negative system is not his general theory of relativity; it has nothing particularly to do with gravitation, but is merely that general case which has got to be understood before we can properly understand the singly limiting case of Einstein's special theory, or the doubly limiting case of the classical kinematics.

I cannot here go into the bearing of all this on the explanation of measuring rods and clocks, beyond saying in general terms that the explanation is on the same lines as Newton's explanation of the stability of the motions of planets, though with an important modification introduced by the use of the general negative catalogue in place of the Newtonian or the Lorentz one. A full consideration of this point would indeed have an important reference to the subject of mathematical proof; but I can here only refer to another point, which has an even more important one, namely its bearing on the theory of numbers.

When, in the theory of the catalogue of the first order, I define unique collation, it (in theory, or symbolically, at least) determines the collation with a unit of the second group of each unit in the first, provided the collations of three of the second with three of the first are given. If, however, these collations in the catalogue are all of them 'reciprocal,' *i.e.*, if whenever A_1 is collated with X_2 , then also is X_1 collated with A_2 ; then it follows that, provided the conjugate pairs so established are maintained, it is enough to determine a new collation of those conjugate pairs as units of thought, to say that one given conjugate pair in the first group is collated with one given in the second; save and except for an ambiguity in the sense of the collation. If, therefore, there is no such change of sense, no 'reversion,' then we can conceive the second of the two groups to be continuously transformed, or slid along, the first, and so we compare metrically the importances of terminated groups in the catalogue; say from A to C , with from X to Z ; by a method which geometers call that of 'superposition'. In using the alphabet as a catalogue, as it has only some 26 letters, we cannot fully represent the cataloguing of a continuous group; but we can do so to any required degree of accuracy by devices analogous to decimal fractions in the case of numbers.

I have indicated the application of this Theory of Order to the continuous conceptions of geometry; can we similarly apply it to the discrete conceptions of arithmetic? The answer is that we can do so; but it turns out, precisely as in the case of geometry, that the common-sense view of arithmetic is only a limiting case, a zero case between a positive and a negative one; just as Euclidian

geometry is a limiting case between two meta-geometries, a positive and a negative one.

No doubt to mathematicians this is no news; at most it will to them be only a novel way of stating a familiar fact. But it does knock on the head 'that peculiar sanctity about the notion of an integer which should protect it against the humiliation of further analysis,' by providing that analysis. It is a further step in the analysis of Hilbert's school; and yet it goes far to upset a notion common among mathematicians, even if it is nowhere explicitly asserted by Hilbert, namely the notion that somehow we have got to start with discrete quantities, instead of with continuous ones, in mathematics. Just as people have always quoted 'mathematical proof,' in support of the idea of deduction from premisses given *a priori* as the basis of philosophy, because they did not understand mathematics; so even mathematicians quote arithmetic, or more recently Cantor's theory of numbers, in support of an *a priori* knowledge of discrete, rather than of continuous, quantities; because they do not understand any theory working the other way round.

In saying this I must of course apologise to Prof. Hardy, and to all your readers, for referring to a work which has not yet been published. I can only say that if he, or any of them in turn, could be induced to take the trouble to read it, I would gladly send them a carbon copy of the work, "A Natural Philosophy," which I have prepared for the press, and which I only do not publish because I cannot afford it.

EDWARD T. DIXON.

BILLY DUN, JAMAICA.

VI.—CRITICAL NOTICES.

The Greek Atomists and Epicurus: a Study. By CYRIL BAILEY, M.A., Jowett Fellow and Tutor of Balliol College. Oxford: Clarendon Press, 1928. Pp. viii + 619. 24s. net.

THE literature of Greek atomism is considerable, but episodical. Articles in periodicals and academic theses are pretty numerous, and the study of Lucretius, who has always had his warm devotees, leads inevitably to the study of his Greek predecessors. But attempts at systematic statement are rare. Therefore Mr. Bailey's thorough survey of the whole field is specially welcome. This book, together with his Commentary on the remains of Epicurus, will afford a most valuable centre and rallying-point in a difficult field of study and will undoubtedly be of first-class importance to students for a long time to come.

Mr. Bailey does not confine himself to the physical doctrine. The introductory survey of the earlier writers, which is chiefly concerned with Empedocles and Anaxagoras, is mainly occupied with physics. The three great names, Leucippus, Democritus, Epicurus, then follow in succession; and in each case, while the main emphasis is on the atomic doctrine, the philosophy is presented in as complete a form as the materials allow. He makes a determined effort to present the philosophy of each of his three main figures as a connected whole and to put each in due relation to the others. He does not of course succeed in clearing up all the difficulties. Leucippus becomes rather more substantial than one might have supposed in advance, but still remains rather shadowy and hypothetical. With Democritus we reach firmer ground, but the relation of his ethics and theory of knowledge to his atomism remains a problem. The root of Epicurus's teaching is found in his sensationalism, and for its strength we are referred rather to its unity and consistency as following from this principle than to any special subtlety or profundity. But Mr. Bailey's very able and on the whole convincing account of the *κρίτηρια* (especially his discussion of *ἐπιβολὴ τῆς διανοίας*) seems to involve Epicurus in treachery to his own fundamental principle, and must therefore awaken some doubts as to the general reading of the system in any philosophical reader.

According to the generally accepted reading of Epicurus's system, with which Mr. Bailey is in full agreement, the foundation stone is rather the principle of the primacy of sensation than the atomic

structure of bodies. That "sensation is the immediate and ultimately the sole guarantee of truth" is, as Mr. Bailey says, "the root-axiom of his whole philosophy" (p. 238). The sovereignty of sensation was tenaciously held by Epicurus and led him into famous paradoxes, such as the much discussed statement about the size of the heavenly bodies which Mr. Bailey gives as follows (p. 256): "The size of the sun and moon is for us what it appears to be; and in reality it is either <slightly> greater than what we see or slightly less or the same size". Epicurus nevertheless did not say that sensation was the only *κριτήριον*. He is reported as recognising three *κριτήρια*, viz., sensations, anticipations and feelings (*αἰσθήσεις, προλήψεις, πάθη*). There is no great difficulty in understanding this trio, or in reconciling them with the fundamental sensationalist principle. They are all the products of involuntary or infra-voluntary processes to which the free act of judgment must conform if it is to remain healthy and escape error. But in addition to these three *κριτήρια* there are passages which point to a fourth test of truth, and Diogenes tells us that by Epicurus's successors it was explicitly accepted as a *κριτήριον*. This is the notorious *ἐπιβολὴ τῆς διανοίας* already referred to. Mr. Bailey devotes a very valuable appendix (previously printed as an appendix to his *Epicurus*) to the elucidation of this notion, and incorporates the results arrived at in two important chapters (II. Canonice, and VIII. The Soul) of the present book.

If Mr. Bailey's interpretation of this "apprehension of the mind" is correct, the notion has a twofold application. To quote Mr. Bailey's own summary of his position (p. 561): "*ἐπιβολὴ τῆς διανοίας* . . . means firstly (a) the immediate apprehension by an act of mental attention of certain subtle 'images,' too fine to be apprehended by the senses, and, in particular, of the 'images' of divine beings; secondly (b) the immediate, or 'intuitive' apprehension of concepts, and in particular of the 'clear,' i.e., self-evident concepts of scientific thought". The first of these cases need not detain us. *Διάνοια* here functions as a sixth sense, invented, as it seems, for the sole and special purpose of accounting for man's notions of the divine. The existence of such a sense in no way impairs the position of the other senses or infringes the general principle that the senses are sovereign. The second case is much more important and much more difficult. Here we have definitely, if Mr. Bailey is right, an assertion of the independence of thought in interpreting the evidence of the senses. Epicurus, we are to suppose, found himself unable to explain the absolute certainty of his main physical principles (the assertion of 'atoms and the void,' e.g., both inaccessible to the senses) without postulating an 'immediate apprehension by the mind of the concepts of scientific truth' (p. 571). To say that this apprehension "is conceived of as a chain of necessarily connected and self-evident visualisations" is a mere evasion if it is intended as a justification of this postulate in terms of sensationalism. For here plainly thought is not behaving like

a sense at all. One sense cannot correct or interpret another. Thought is here regarded as a source of new ideas in a fashion which the sensationalist tradition has always found inadmissible.

There can be little doubt that something is wrong here. It is possible that Mr. Bailey's interpretation of the passages which he examines so carefully is wrong. It is possible again that Epicurus was in fact less consistent than Mr. Bailey supposes. A third possibility—and perhaps the most probable of the three—is that the root-principle of the Epicurean synthesis is not so much sensationalism as naturalism, a belief in feeling and instinct and intuition, and generally in everything that has the mark of immediacy, as opposed to the artificial elaborations of conscious voluntary activity. To discuss these alternatives would take us too far afield. We must be content to indicate this crucial point in which, as it seems to us, Mr. Bailey's presentation of the Epicurean system fails to carry complete conviction.

No one, however, who has the slightest acquaintance with the field over which Mr. Bailey has worked, would have expected him to solve all his problems. He has undoubtedly made one of the most important contributions to the history of Greek Philosophy which have been made in this country in recent years, and deserves before all else our thanks and our congratulations on his achievement. It is in that spirit that we offer the few comments which follow on points of detail.

(1) The saying which Mr. Bailey most often quotes as representative of Epicurus's sensationalism is this—*κατὰ τὰς αἰσθήσεις δὲ πάντα τηρεῖν* (*Ep.* 1, § 38), which he translates—"we must keep all our investigations in accord with the sensations." There seem to be two good reasons which make this translation inadmissible. First, *τηρεῖν* is not likely to mean 'keep,' especially in a sentence in which the word *αἰσθήσεις* occurs. Secondly, the prepositional phrase *κατὰ τὰς αἰσθήσεις* cannot function as an adjective. Surely the sentence means—"we must view all things on the lines laid down by the senses." Room is left for inference by analogy or otherwise to *ἀόηλα*, but there, as with the *πρόδηλα*, sovereignty remains with sense.

(2) Mr. Bailey says of Democritus (p. 110)—"A large number of mathematical works suggest the influence of Egypt." Why? Is there any evidence that at this date Egypt was a school of mathematical inquiry? Even if Democritus did go to Egypt, it is pretty certain that any bent for mathematics he may have had would have declared itself before he went there.

(3) "Plato," we read (p. 217), "carrying on his master's tradition, spoke slightly of the studies of astronomy and physics, and would relegate them to the early training of young men, who were being prepared for the higher study of dialectic." It is only necessary to add that by this standard he spoke even more slightly of geometry!

(4) For the aphorisms of Epicurus found in the Vatican MS., commonly referred to as *Sententiæ Vaticanæ*, we are referred (p. 228,

n. 2) to *Wiener Studien*, 1888, without any mention of the facts that this article was reprinted in Usener's *Kleine Schriften*, and that the aphorisms are now available in Von der Muehl's recent Teubner *Epicurus*.

(5) The bibliographical statements about the publication of the Herculaneum papyri made on p. 229 are defective in several ways. There are two series of *Volumina Herculaneusia*: only the second is mentioned. Further, Bassi published one fascicle of a third series just before the war. There are many more reconstructions of Philodemus than those mentioned in n. 2. It would be as well to state that a student would normally be wasting his time by going to the *Volumina Herculaneusia* at all, since almost every fragment of value contained in those volumes has been better edited elsewhere. Bassi's publication of 1914, however, indispensable for the papyri with which it deals. Thus the student will be wasting his time if he follows Mr. Bailey's advice and refers for certain statements about the Gods to *Vol. Herc.* I. vi., 13-17 (n. 1). He will be puzzled and baffled if he looks for *Philodem. de Vict. Deor.* (n. 4). The fact is that this papyrus has been excellently edited by Diels in the Berlin Academy *Abhandlungen* under the title *περί θεῶν Γ*; and the student should be referred in the first instance to Diels's edition. There are other notes on the same page in which reference is made to Scott's *Fragmenta Herculaneusia* when it should have been made to Diels's much fuller and better edition.

(6) "There can be little doubt that, as Giussani has pointed out, the idea of the 'fourth nature' is derived from Aristotle's 'fifth element' in the soul (*πέμπτη οὐσία, ἐνδὲλεχεια* (sic)), which was of course wholly spiritual and non-material" (p. 391). Giussani here gives his source (Cicero) in full, which Mr. Bailey does not, and adds a footnote concerning the possible relation of this doctrine to the doctrine of the soul as we have it in the extant works of Aristotle. Some indication that this Aristotle is not the Aristotle of our texts seems to be required.

(7) "The 'fourth nature' is 'nameless' or rather 'unpredicable' (*ἄκατονόμαστον*)" (p. 392). It is difficult to say what 'unpredicable' means, but it certainly cannot mean what Mr. Bailey seems to wish it to mean, viz., 'of which nothing can be predicated'.

J. L. STOCKS.

Sein und Zeit. By MARTIN HEIDEGGER. Halle a. S., Max Niemeyer, 1927. Pp. xi + 438. M. 20.

THIS is a very difficult and important work, which marks a big advance in the application of the "Phenomenological Method"—though I may say at once that I suspect that this advance is an advance towards disaster.

Heidegger is probably the most original and powerful of Husserl's

pupils; and this book, which is dedicated to Husserl and first appeared in his *Jahrbuch für Philosophie und phänomenologische Forschung*, Vol. VIII., presupposes a knowledge of the published works and refers explicitly to more recent teachings and writings, as yet unpublished, of that difficult author. Now if *Sein und Zeit* were nothing more—and it is more—than a re-exposition of the ideas of Heidegger's teacher, it would be hard enough for, anyhow, English readers to understand, since, save in chance quotations, not a word of Husserl has yet been translated and no adequate exposition in English of the cardinal positions of Phenomenology or even of the logical, epistemological and psychological doctrines contained in the *Logische Untersuchungen* (1900-1901 and re-edited with modifications 1913) has yet been given.¹ Moreover, to add to our difficulties, until recently there has been an additional historical obstacle to the understanding of Husserl, namely that no sure estimate could be formed of the nature and extent of the influence upon Husserl of Franz Brentano, though it was known that this was great; as, until Kraus and Kastil devoted themselves to the task, most of the psychological and philosophical teaching of Brentano remained unpublished and inaccessible. And finally the "logical Realism" of Bernard Bolzano (1781-1848) which, with that of Frege, was so largely formative of Husserl's logical theories, must for the present remain unexplored country for most researchers in this field; since the first and only complete edition of his most important *Wissenschaftslehre* (1837) is unprocurable, and even Höfler's re-edition in 1913 of the first two of the four books is now out of print.

It is, however, now becoming possible to see in some sort of perspective what were the beginnings and what have been the stages in the growth of Phenomenology, and a short sketch of its genesis must preface my attempt to state even the programme and method of Heidegger—many of his conclusions for lack of comprehension I must abandon unexpounded.

Brentano was, like Bradley, a step-son of the "Association-philosophy"; for him, as for Bradley, the problems are largely set by Locke, Berkeley, Hume, and the two Mills, as well as by Herbart; and he, like Bradley, makes a partial escape from the conclusions of Hume by a theory of Judgement which denies the (for Locke) basic position that judging is a *coupling* or *having-together* two "ideas"; instead, he asserts, a judgement contains one "idea"-element *plus* another element irreducible to "idea," namely the element of acceptance or rejection, affirmation or negation. Unlike Bradley's, Brentano's metaphysic was Aristotelian and Thomist rather than Hegelian, and unlike him again, avoiding any attempt to *define* Judgement (*e.g.*, in terms of Subject and Predicate) he contents himself with declaring judgement to be an ultimate,

¹ But see Boyce Gibson's article in *MIND*, 1922; references and quotations in Bosanquet's latest writings; and Linke's article in *The Monist*, 1926.

irreducible and indefinable psychic fact, differing qualitatively from the primitive psychic fact of "having an idea" (*Vorstellung*) just in the presence to the former of the extra element of "accepting or rejecting".

He went on to find a third class of psychic facts, equally irreducible to "ideas" or even to Judgements, namely Feelings of "liking and disliking" or "wanting and aversion".

He thus broke with the English school by rejecting "Association" as the one principle and "Ideas" as the one element of psychic complexes, setting up instead a division of three irreducible types—capable, of course, of various inter-combinations—of psychic facts or "phenomena". This division was accepted as basic, anyhow at first, by all his pupils, and in particular by both Meinong and Husserl; and it has led them, with others, into profound and important investigations in the psychology and philosophy of thinking.

That, however, despite the improvements that he introduced, Brentano was fundamentally a member of the school of Locke, is shown by the fact that for him "ideas" (*Vorstellungen*) are, if no longer the whole, yet still the substrate of all conscious experience; for while an act of "having an idea" (*Vorstellen*) may occur alone, an act of judging or feeling must always be founded in one of "having an idea". To judge is to have an idea and to do something with it; to feel is to have an idea and to take up an attitude towards it. We, made wise by the event, may already wonder whether such premisses will not in due course lead to a subjectivist or agnostic theory of knowledge.

There is a character shared by acts of *Vorstellung*, Judgement and Feeling in virtue of which they may all be classified as *psychical* as opposed to *physical* facts, namely the necessary presence to all of them of an "immanent object" or "content".

There is no "having an idea" that is not having an idea of something; no affirming that is not affirming something, no wanting that is not wanting something. This relation of a psychic act to its content or immanent object is named by Brentano, in loan from the schoolmen, the "intentional" relation; and the content or immanent object that the act is of is the "intentional" object. "Intentionality" is the essential character of consciousness, and is what differentiates the psychical from the physical (a "*res cogitans*" from a "*res extensa*").

Two important things must be noticed about intentionality (which is, of course, ultimate and indefinable): (1) It has nothing to do with "intending" in our sense of intending or purposing to do: its affinities are rather with the doctrine of "first, and second intentions." Heidegger in an earlier work on Duns Scotus showed that his use of "*intentio*" was closely akin to Husserl's "Meaning" (*Bedeutung*). (2) The "intentional object" of an act of consciousness is not an extra-mental reality, but immanent in the consciousness of which it is the "content". Its status is

psychical, and it exists, if it exists at all, when the act that "has" it is in existence. Its being is to be "accusative" to an act of consciousness.

That is to say, Brentano's theory of intentionality is not to be construed as a premiss to or conclusion from a Realist theory of knowledge but only as a clearing up of an ambiguity latent in the use of such terms as Idea, Judgement, and Feeling.

However, Brentano is not a Solipsist; so the further distinction has to be made, between the content or intentional object of a psychic act, and the real, extra-mental object, *e.g.*, a "thing" in space and time. All psychic acts have intentional objects; only some have also real objects. For instance, the "idea" of a Golden Mountain has a content but no object; that of Mount Everest has both. Thus, too, the idea of "the composer of the *Iliad*" and that of "the composer of the *Odyssey*" have different contents, but (perhaps) the same real object.

As there are three ultimate types of psychic acts, so there are three ultimate types of intentionality; though those of Judging and Feeling are founded in that of *Vorstellung*.

The next important legacy of Brentano, and one which was a necessary condition and almost the sufficient condition for the birth of Phenomenology, was his theory of the absolute Self-Evidence (*Evidenz*) of "inner perception" or the perception of our present psychic acts and states *with their intentional objects*.

Harking back to Descartes' Method of Doubt and his "*Cogito ergo sum*," he asserts that while our judgements of external reality are contingent and problematic (since they are founded in "ideas" the contents of which are different from and ultimately incomparable with their extra-mental real objects), our judgements of what is immanent in the consciousness of the judger are self-ratifying, since there is *identity* between the content and the object of the idea which, *quâ* judging, we are asserting.

Thus I may doubt whether I am really seeing a ship, but I cannot doubt that what I see *really* looks to me as it *seems*, or that I am really believing it to be the look of a ship; I may doubt whether sardines are good food, but I cannot doubt that I like them.

He gives to the objects of "inner perception" the general title of "Psychic Phenomena" or the "Phenomena of consciousness," using the term "phenomenon" (it is important to note, to appreciate the meaning of "Phenomenology") *not* in the sense of Kant but in that of Comte; *i.e.* to denote not an "appearance" as *opposed* to a reality, but a *reality that appears i.e.* manifests itself. So a "psychic phenomenon" is simply a particular manifestation of consciousness. Often, indeed, the term means little more than "fact" in ordinary parlance.

We have then in inner perception of our own psychic phenomena a fount of self-evident judgements which are both affirmative and existential; and we have no other such fount (though we may make

self-evident *negative* judgements of the form "No X is Y" or "there is no X that is Y" simply from logical insight).

So all positive knowledge either is, or is founded in "inner perception," and the science of the objects of inner perception acquires accordingly a priority over all other sciences.

Now the science of the objects of inner perception falls for Brentano into two major divisions. At first only in his practice but later also explicitly in his theory he divides Psychology into "genetic" and "descriptive" psychology. Under the former he classed all forms of inductive, experimental, statistical, anthropological, evolutionary, and pathological or physiological psychology; but these all presuppose the findings of "descriptive" psychology, the function of which it is to analyse and describe the general types of psychic phenomena or the general modes of intentionality which the particular data of "genetic" psychology exemplify. The method of "descriptive psychology" is intuitive, moving not by inference but by direct inspection of individual instances of psychic phenomena in which the universal type-structure can be read. We are told that Brentano, reserving the title "psychology" for the inductive or "genetic" branch, came later to call the descriptive science of psychic phenomena by the name "Psycho-gnosis". Kraus, more recently, has coined for it the name "Phenomenognosis": but the title that will stick is that adopted by Husserl and his school—"Phenomenology". It would have been more accurate, if less convenient, to call it "Psycho-phenomenology" since its subject-matter is limited to psychic phenomena; but as, in the end, the conclusion is reached that *only* such entities as are psychic are self-manifesting, *i.e.* are proper "phenomena," this precision would perhaps be extravagant.

These are, I think, the most important of the teachings of Brentano for the history of Phenomenology; they are not, however, his *only*, and in some respects they are not his final teachings. For, alarmed by the erections made upon his foundations by his two leading pupils Husserl and Meinong, he came later to withdraw or re-fashion some of his theories. These later theories, however, need not be expounded here.

Husserl began his career as a theoretical psychologist of the school of Brentano; and a native interest in the theory of mathematics led to his first book *The Philosophy of Arithmetic* in which he applies the principles of Brentano to the special field of arithmetical "ideas". Hence, like Meinong, he was driven back to the general problem of the nature, status, and origin of "abstract ideas," *i.e.*, concepts and ideas of relations; and the early writings of both are accordingly largely composed of criticisms, amazingly acute and profound, of the treatment of these problems by the English Locke-Spencer school. And it is perhaps no coincidence that Brentano who claimed to be the pupil of Aristotle and the Schoolmen should be the teacher of pupils who re-affirmed the independent reality of "entia rationis" and found in our thinking elements that were not "sensations" or echoes of "sensations".

Husserl in particular came then to see the domain of the logical as no mere province in the domain of the psychological, and in the First Part of his *Logische Untersuchungen* he attacks root and branch the fallacy of "psychologism," of which at that date almost all logicians were victims, the fallacy, namely, that the objects of Logic, universals, Facts, implications, relations, types, wholes, etc., are simply varieties of mental states, processes, and dispositions. His sustained and masterly demonstration of the self-ruinous character of all such "psychologistic" theories and of the necessity of a "pure" and independent science of Logic, to which parts of the Second Part of the *Logische Untersuchungen* are valuable contributions, have been of radical importance for German philosophy and psychology in the last quarter of a century.

But he had other fish to fry than merely to elaborate a "Platonic" logical Realism, and though many would have preferred him to work along the lines of Bolzano and Frege in the direction of a pure Formal Ontology, like the "Gegenstandstheorie" of Meinong, he had no intention of abandoning his first love, the study of the phenomena of consciousness. Emancipation from "psychologism" did not involve desertion of the task of analysing the types of "intentional experiences"; and clear ideas about the objects of knowing and thinking were an aid and not a hindrance to his study of what knowing and thinking in essence are.

Especially does he devote himself to the complex problem or cluster of problems of the nature and status of Meaning. For this general and even over-catholic title covers both the "terms" and "propositions" (i.e., roughly, the word-meanings and sentence-meanings) with which logic has to do and the "ideas" or "conceptions" and "judgements" which are the objects of the psychology or Phenomenology of Thought. More, the theory of mathematics necessitates an understanding of what symbols and symbol-meanings are; metaphysics must have or give an account of the sort of being possessed by "concepts," "facts," and "propositions" (or Meinong's "objectives"); the philosophy of language and of grammar pivot on the idea of "expression," and these are all problems of "Meaning". And lastly the characterisation of all conscious acts as "intentional experiences," i.e., experiences in the essence of which it is that they are of something other than themselves, soon led to the adoption of the noun "Meaning" to denote the "intentional object" of a psychic act, and of the verb "to mean" to denote the intending of its immanent object by such an act.

It is, then, in the first instance the Phenomenology of those psychic acts that have *logical* Meanings, i.e., of acts of thinking, that Husserl prosecutes; but concurrently he is developing the general theory of Phenomenology and the general theory of its subject-matter, the intentionality or meaningfulness of consciousness in general. And this general theory we may now sketch. Phenomenology is for Husserl the science of the "phenomena of

consciousness" (a phrase of Brentano's which Husserl for good reasons came to relinquish) or of "intentional experiences". But it is not a "matter-of-fact" science: it does not deal with actual instances, in the sense that it first records and explores these and then makes inductive generalisations from them. Rather it is a science of Essences; it is the science of the character that any experience must have to be a case of doubting (say) or questioning or fancying or inferring. Its subject-matter is the type or type-structure of intentional experiences as discerned *intuitively* in some real or imaginary exemplary instance. In a word its subject-matter is Essences and not individuals and its method is by "exemplary intuition": so that it stands to empirical psychology as geometry stands to geography.¹

That there *are* Essences and that we can know them has been already established in the more purely logical parts of the *Logische Untersuchungen*.

Now as Phenomenology is the "eidetic" science of intentional experiences, as such, it covers with its net in a certain sense *everything*. For whatever in any sense *is*, be it an existent or a subsistent, a fancy, a fact, a relation, the number 7, a hope, a piece of nonsense, the Equator, etc.; in a word anything that could conceivably be named or thought about is potentially *for me*; *i.e.*, it is potentially the objective correlate or intentional object of some or other act of my consciousness. I may know it or wonder about it or entertain it or be angry with it and so on, and it is therefore actually or potentially the "accusative" (I borrow the metaphor from grammar, as we have no separate rendering for "Gegenstand" as opposed to "Objekt") of an intentional experience. And the sort of intentionality that makes my Erlebnis what it is, is in its specific detail as in its generic structure something the analysis of which belongs to Phenomenology. This leads to important and (I think) dangerous consequences; for the science of Phenomenology is given a primacy over all other sciences, and it, itself presupposition-less, is supposed to be sovereign over presuppositions which all other sciences must make.

For already in his *Logische Untersuchungen* Husserl, on the basis of what I regard as a serious error in his theory of Meaning (derived, I suspect, from Brentano's founding of Judgement and Knowledge in *Vorstellung*), had erected a theory of knowledge or self-evident judgement according to which such objects of knowledge as are not experiences "enjoyed" by the knower of them are tissues of Meanings, which Meanings are the *gift* of consciousness; so that consciousness is *constitutive* of all objects that are (or pretend to be)

¹ A good statement in English of what are in fact the subject-matter, method and relations with empirical psychology of Phenomenology is given—of course unwittingly—by Cook Wilson, *Statement and Inference*, Vol. I., p. 328, and the last sentence of § 119 on p. 277. And his analyses, *e.g.*, of Opinion, Conviction, and Belief are admirable applications of the "Phenomenological Method".

transcendent. This culminates in a doctrine explicitly formulated in his "Ideen zu einer reinen Phänomenologie," which reminds us strongly of Kant or Green, that "pure consciousness" is the only self-subsistent reality and the absolute *prius*. And he speaks accordingly of all objects of psychic acts, *including all objects of knowledge*, as "correlates of consciousness"—things the being of which is to be "accusative" to actual or possible intentional experiences.

There is thus a progressive trend visible in the philosophy of Husserl and his followers towards a rarified Subjective Idealism or even Solipsism, a trend which, in my view, is not necessitated by the idea of Phenomenology, which I regard as good, but only by a particular elaboration of a part of a special theory of Meaning which is, if I am not mistaken, an evil legacy from the Locke-Brentano hypothesis of the existence of "ideas"—certain mental entities out of which knowledge is somehow composed, though they are neither the objects known nor yet our acts of getting-to-know, but representatives between the former and the latter.

This very sketchy account of a few of the threads in the philosophy of Husserl—I can give here no exposition of the many other elements in it which I believe to be of really notable importance—must serve as a preface to Heidegger.

Heidegger's only previous published book was a little work on Duns Scotus whose doctrine of the Categories, Intentionality, and Meaning he expounds clearly, comparing them *en route* with kindred views of Husserl.

In *Sein und Zeit* however, he breaks new ground and in some 440 large pages he builds up what he himself only claims to be the threshold to the solution of a problem vastly more profound and radical than any that Husserl has yet formulated. Moreover, in the course of the book Heidegger sets himself to the construction of a new philosophical terminology, especially designed to denote unambiguously the basic categories of Meaning which he is trying to explicate.

Phenomenology must be presupposition-less; that is to say, phenomenological interpretations or analyses must take for granted no theories or observations made in a state of (phenomenological) naïveté. This is common ground. But in fact—so Heidegger thinks—previous phenomenologists had failed to disembarass themselves of a weighty inheritance of presuppositions, the presence of which either cramps or vitiates their results. For instance, the historical genesis of Phenomenology from psychology, the survival in that psychology of the simple Mind-Matter dualism of Descartes, as well as the "chemical" theory of atomic ideas, states, and dispositions, the universal domination of Platonic and Aristotelian categories over all contemporary philosophical and psychological thinking, have stood in the way of the strict application of the phenomenological method; with the issue that even the most radical of its exponents have been tackling, with tools that were not their own, objects that they could only see with a squint.

It is no longer, or rather it is not yet, the time for Phenomenology to analyse the types of psychic acts and their interconnexions, to examine the relation of "act" to "content" and of these to "real physical things" and "the world"; for the original isolation of such things as types, psychic acts, act-contents, physical things and the world, was one inherited from naïve predecessors and not *found* by phenomenology.

The most fundamental presuppositions are ontological presuppositions; and it is to this field that Phenomenology must go, deliberately postponing the study of the twigs until it has completed its examination of the root. And the root is Being (*Sein*). The root problem of Phenomenology is the Meaning of Being—not in the sense that a *definition* is sought for it, for that would be a nonsensical demand, but that an insight of a new—phenomenological—sort is wanted, in possessing which we shall know 'with a difference' something which, of course, we must understand or know 'in a way' already. And by "Being" is meant not this or that entity of which we can say that it is or that it is something, but the universal which these exemplify.

Now Husserl, though he reached the point of saying that *Sein* is nothing else than the Correlate of *Bewusstsein*, i.e., Being is just what Consciousness has as its "accusative," had never quite emancipated himself from the Cartesian point of view that Consciousness and Being are *vis-à-vis* to one another in such a way that in studying Consciousness we are studying something on the outside of which and transcending which lies a region of absolute Reality.

And in this frame of mind he could *separate* the spheres of Phenomenology and Ontology by saying that the former is the science of Consciousness, the latter the science of—something else.

But Heidegger is critical of this naïve assumption; and Phenomenology must, he urges, so far from accepting the alleged cleavage between Consciousness and Being, select as its first task of all, the analysis and description of that most primitive level of Experience in which is generated *for us* that seeming polar opposition. Our attitude of regarding Being as the opposite of Consciousness is itself one of the intentional experiences, and perhaps the most important of the intentional experiences that Phenomenology must examine.

In this way Heidegger turns the tables on the objection that a more orthodox phenomenologist would be certain to raise, namely, that Phenomenology, being by definition the science of consciousness, can only take Being into its province on the illegitimate assumption that Being is an *Erlebnis* or a component of an *Erlebnis*.

Next, as well the Husserlian as the Kantian or Cartesian accounts of Thought or Consciousness are stated in terms of the ontological categories of Plato and Aristotle. But as these cate-

gories were distilled out of a natural and naïve (*i.e.*, pre-phenomenological) attitude towards the world and ourselves, they must be not indeed rejected but put, so to speak, in inverted commas; they must be accounted for with the naïve attitude from which they sprang. They cannot supply the terms in which we are to unpack the Meanings for which we are looking, for they are at least under suspicion of being metaphorical. Phenomenology is Hermeneutic and the categories which are the untested framework of our everyday world are among its primary *interpretanda*.

As a practical consequence of this view Heidegger imposes on himself the hard task of coining, and on us the alarming task of understanding, a complete new vocabulary of terms—mostly many-barrelled compounds of everyday “nursery” words and phrases—made to denote roots and stems of Meaning more primitive than those in which Plato, Aristotle, and subsequent scientists and philosophers have so taught us to talk and think, that we, by the strong force of habit, have come to regard as ultimate and pivotal ideas which are in fact composite and derivative. Heidegger’s ontological Phenomenology is to turn our eyes back again to contemplate with a new method and a new clarity the springs of Meaning from which flow our most familiar and most “homely” conceptions and classifications. The principle on which he seems to be designing his new terminology is, I should judge, the hypothesis that certain “nursery” words and phrases have a primitiveness and freedom from sophistication which makes them more nearly adequate expressions of really primitive Meanings than the technical terms which science and philosophy in the course of a long development have established.

The hypothesis seems to me a perilous one, for it is at least arguable that it is here, and not in the language of the village and the nursery, that mankind has made a partial escape from metaphor.

In *Sein und Zeit* Heidegger does not make the assault upon his final objective; he opens the campaign with a preliminary occupation of a terrain that is nearer home. Indeed it is of the essence of his starting-point that it is as near home as possible, for before trying to interpret what is the Being which any entity as such has, he tries to examine what sort of Being *we* have who are making the examination.

Like Brentano and Husserl he goes back to Descartes’ ‘*Cogito ergo sum*’ and enquires more deeply than Descartes could do not merely what is a ‘*cogitatio*’ or what can be done by or what can happen to a ‘*res cogitans*,’ but what the ‘*I*’ is and must be for such actions and passions to be possible. The threshold to the Hermeneutic of ‘*Esse*’ is the Hermeneutic of ‘*Sum*’; and if he can find out what it ultimately is to be an experiencer having experiences, a door, perhaps the only door, will be open for the next search after the innermost Meaning of Being.

The title that Heidegger appropriates for an ‘*I*’ who thinks and

in particular is asking the questions, using the methods, and appreciating the answers that I am now doing, is "Dasein" (one of numerous loans from established *philosophical* terminology which, however necessary, are certainly confusing). The business, then, of the present work is the "Hermeneutic" or "Analytic" of "Dasein"; and as my being is not a timeless subsistence but a being-myself through a continuum of "nows," the special problem of the work as indicated in the title is to analyse the intrinsic *temporality* of my being.

Perhaps also Heidegger's interest in the way in which time enters into conscious experience was stimulated by some lectures that Husserl was giving, in 1905 and later, on the inward experience of time. These have just been edited and published by Heidegger.

Now the most fundamental and "primitive" moment of a "Dasein's" being is "being-in-the-world"—being in it not as a chair is in a room or a cow in a field but as having it or being through and through occupied with it and by it. The world that I am in in this sense is all that it means to me; it is what makes me an experiencer of experiences. "Being-in-the-world" for a "Dasein" is just the tissue of its attitudes, interests, and utilisations. In a word, the world that I am "in" is simply the sum of what I am about. The distinction between theory and practice, or thought and will, between thinking-about and doing-about is derivative from the primitive mode of a "Dasein's" being—namely "being-about . . ." (*besorgen*). Nor is it a mere chance attribute of a "Dasein" that it has this character of "being-about . . .". Rather it is the essence of its being what it is, to "be about . . .". And so, as the world, namely what I am about, belongs intrinsically to what I am, the pretended Subject-Object dualism is a pure fiction imported from the naturalistic attempt to see the relation between me and my world as akin to a relation between one fragment and another fragment of my world.

One of the derivative ways of "being-about . . ." is "thinking-about . . .": and of this one of the derivative modes is knowing; and that this is derivative and not primitive is shown by the fact that before knowing I must "wonder about . . ." and before "wondering about . . ." I must be "interested in . . ." or "concerned about . . ." which in the end turns out to be close to the most primitive mode of "being-about . . ." and also of "being-an-I" that there is.

Now while everything that I am-in-the-world-with has the character of being something that I am-about, this is not yet enough to characterise what we ordinarily term 'Things'. The Meaning of 'Thing' is not primitive but derived, and before the world that I 'have' is stocked with 'Things,' it is stocked with *instruments* or *tools*, i.e., what I can "work-with" in the performance of some task for some end. Later comes the conception of a 'Thing,' namely what can't or needn't be worked with: the conception of 'Thing' is derived from the conceptions of 'unemployed' and 'instrument':

so the mode of "being-about . . ." which is *using* is primitive to the modes of "being-about" which are knowing, classifying, and naming 'Things'.

(I may here interject that Heidegger seems to be confusing what is anthropologically primitive with what is logically primitive. It is perhaps a fact of human nature that I begin by being interested in things for what I can or can't do with them and only later do I want to know as a scientist what they are. But the former attitude involves equally with the latter the knowledge of things as having attributes and relations, though in infancy I restrict my interest to a few of those attributes and relations, namely those which bear on my business.

I must leave till later my further and fundamental objection that all these so-called "primitive" attitudes or ways of "being-an-I" really involve *knowledge*, which knowledge necessitates universals and categories upon which the Analysis of Dasein throws—and can throw—no light at all.)

It is important to note that in all the ways of being-about, being-in, being-with, and being-without that characterise a "Dasein," the Dasein has some sort of *understanding of* what it is being or doing. Not that it has scientific, "thematic" *knowledge*—for this is a late product—but the moods, tenses, and inflections of its being-itself are "illuminated" or "transparent" to itself. If it were not so the Analysis of Dasein would have no self-evidence, and so would not be the proper approach to our ultimate problem.

The spatiality of the world is derived from such primitive attitudes as having-to-hand-convenient-for-using or not-having-to-hand; but apart from mentioning the similarity of Heidegger's treatment of Space and later of Time with that of Bergson and some anthropologicistic pragmatists, I must pass quickly over this and several other important sections in which the constituents and structure of the world we 'have' are derived or analysed.

What in the end is a Dasein? What does 'sum' in 'Cogito ergo sum' ultimately denote? Behind the question "what are the root types of my behaviour, my attitudes, my actions, and my passions?" lies the question, "What is it to *be* an I ('Dasein')?"

The answer rings at first strangely. "Dasein ist Sorge." What I am is Concern or Care (Cura). Willing, wishing, wondering, reflecting, knowing, doing, with their "accusatives," all are ways of "caring" or "caring about" or "caring for".

Heidegger tells us that he came to this conception of Care as the absolutely primitive Being that an 'I' as such has, through studying the Augustinian and other Christian philosophies of human nature; but I surmise, too, that there are legacies in it of the characterisation by Brentano and Husserl of Consciousness as what has intentionality. For by "Care" Heidegger does not mean any particular emotion of fearing, or being anxious, or wishing, or any particular act of striving, or any particular inclination or impulse,

but the primitive sort of being in which all such emotions and acts and states are founded; for they are all particular ways of "caring".

Next (what bears on the special problem of the *temporal* nature of an 'I'), what I am is not exhausted by what I have done and become up-to-date; rather it is of the essence of my being what I am that there are potentialities in me; I *can* be what I am not yet; and what I can be belongs just as intrinsically to my being as what I am already, *i.e.*, that of my being which I have already realised. Care is accordingly as essentially care about what I might be as care about what I already am. This leads to an analysis of what my Being as a *whole* is, *i.e.*, the whole structure of which what I am up-to-date and what I might be are integral moments. Now one of the characteristics of my whole being is that *quâ* Life it terminates in Death—*terminates* in Death without finding its *completion* in it. So we have to investigate what sort of a whole it is which has both termination in Death and a completion (never fully realised) in being all that it has the potentiality of being. In this whole belong conscience—the certainty of what I might be—and the sense of sin or guilt—the certainty that I am not what I might have been. (Here Heidegger is reviving important Augustinian theses which lead one to wonder if the second part of this work will not be a sort of Eckhart philosophy in phenomenological clothing.)

But here, for the reviewer at any rate, the fog becomes too thick; and the results of the analyses of our intrinsic temporality, of the several concepts of time, historical becoming, history, and the criticisms of the theories of Dilthey and Hegel must go unexpounded.

A word about the *method* of Phenomenology. It is its boast that it does not make and does not presuppose "logical constructions" or "theories" or "systems". "Phenomenology makes no hypotheses." It does not move by making deductions from axioms or inductions from observed and recorded facts. Its method is that of "exemplary intuition," *i.e.*, the inspection of individual examples *quâ* exemplifications of Essences or Types—this of course in the region of consciousness. We intuit in this or that feeling of anger, act of choice or imagination, that essential character lacking which the particular examined would be something other than a case of being angry, choosing, or imagining.

So here, Heidegger claims simply to be revealing, unpacking or interpreting the essence of what we do and are. Accordingly, his sentences which on first reading seem to be mere dogmatic assertions, have to be read as expressions of a Hermeneutic analysis to understand which is to see that it is true. He is simply telling us explicitly what we must have known 'in our bones' all the time. Similarly, *e.g.*, Cook Wilson does not tell us anything *new* about Conception, Opinion, or Belief; he is telling us something which we, when told, recognise that we knew implicitly from the start.

The dangers lie in the undue extension of this method; if, for instance, our interpreter has, without realising it, a theory of knowledge, or a metaphysical system, he may easily come to interpolate into the interpretations that he gives something that could never have been intuited in the exemplary instance he is examining—since, even if it be true, yet it was never in the Essence of that example. Or else, under the same influence, he may omit to notice an integral element in that Essence. Thus I suspect that certain theories of human nature have been interpolated into Heidegger's analyses of it; and on the other side the basic place of knowing in being-in-the-world or in any experiencing of a Meaning has been forgotten. And so an anthropologicist Metaphysic seems to have been read out of our every-day experience, of which both the positive element of Humanism and the negative sceptical element of Relativism and Solipsism appear to be derived from views interpolated into and not won by the Phenomenological Method.

It remains to make a few tentative comments and criticisms upon the general idea, and especially the method, of this approach to the Hermeneutic of Being *via* the Hermeneutic of "being-an-I" ("Dasein").

(1) In the first place it is taken for self-evident that some sort of *understanding* what I do and am belongs essentially to my doing what I do and being what I am. This doctrine is, I suppose, the same as that of Brentano and Husserl that in "inner" or "immanent perception" I have a source of self-evident positive judgements and that I have no other such source; so that any degree of "Evidenz" in any positive judgement that I make must either be or be grounded in the self-evidence of "inner perception". But while there is no objection to the thesis that I can know my own experiences and the 'I' who has them, the assertion that this is all that I can know, or that if I can know anything else I can only know it if I first know my experiences and my 'I', is far from self-evident; indeed it seems to me to contradict itself. At any rate it presupposes a theory of knowledge and a metaphysic, and so a Phenomenology based on this theory is not presuppositionless. However it might still be the case that the analysis of what it is to be "an I" and to experience my experiences was the best, though not the only, approach to the ultimate analysis of what Being as such is. 'I' might be the most accessible or the most transparent example of Being.

(2) Some would quarrel with the original assumption that there is a problem about the Meaning of Being. But as the (perhaps departmental) question of the relation between Being *quâ* timeless "subsistence" and existing *quâ* existing in the world of time and space seems to me a real one, I do not take up this cudgel.

(3) But there is what I regard as a vital ambiguity present in that expanded theory of Phenomenology which makes it the logical 'prius' of not only psychology but logic, metaphysics, and the

mathematical and natural sciences. Accepting Brentano's improvement on the Locke-Hume theory of "ideas" according to which the distinction was made between the act and the content (or immanent object) of a *Vorstellung*, the phenomenologists have very properly generalised the principle and find in every phenomenon of consciousness, *i.e.*, in every intentional act or experience an act side and a content or Meaning side. Then looking at the world, they see that every thing or event, every relation or universal, every conceivable 'It' can be regarded as the objective correlate or content to an appropriate act of consciousness—knowing perhaps, or surmising, or being vexed at, or wanting, or being interested in.

And as it is the proper business of phenomenology to analyse states and acts of consciousness, everything is in this way drawn into its net; for anything and everything is or has a Meaning-forme, and the meaning of the act or acts in which it has its meaning-for me is the proper subject matter of the science of intentionality.

But while it is a dangerous metaphor to speak of acts having "meanings" or of things as being the "meanings of acts," it is a fatal error to speak of a thing known as the correlate of a knowing-act as if that implied that we could get to the heart of the thing by analysing our experience of knowing it. A twin is a correlate to a twin but operations upon the one are at most operations upon the other one's twin, not operations upon the other one himself.

And this leads to dangerous results in the practice of the phenomenological method; it leads to them here in *Sein und Zeit*. For the presence of *knowledge* of some reality (which is surely present in any and every conscious experience) though it is not explicitly recognised is surreptitiously imported as well into such terms as "understanding" and "illumination" as into the countless nursery-terms which Heidegger is trying to build up into a new philosophical vocabulary.

For instance the general characterisation of our conscious being as a "being-in-the-world" surely implies that *underlying* our other reactions and attitudes there is *knowledge*. We 'have-' or are "in-the-world" only if we know that at least one 'something' exists. Similarly the attempt to derive our knowledge of 'things' from our practical attitude towards tools breaks down; for to use a tool involves knowledge of what it is, what can be done with it, and what wants doing.

And if we like to call things that we know "correlates of acts of knowing," we must at least recognise that the analysis of what those things are is not in the least degree forwarded by an analysis of our acts of knowing them, but only by getting to know still more about the things themselves.

This ambiguity is especially well-concealed, equally deeply involved, in the conception of Meaning. The thing which I know and which I signify with such symbols as sentences is in one sense of the word the 'Meaning' of my sentences: but it is not (except per accidens) an *Erlebnis* or an act of consciousness; nor is it anything constituted

by an act of consciousness. Only in another sense of the word is "Meaning" something derivative from a state or act of consciousness—namely when it is not the thing symbolised by a symbol but the fact that this symbol symbolises that thing. Certainly a symbol symbolises because we choose that it shall, so its meaning (*i.e.*, meaningfulness) is the product of an act of consciousness, but the origin of the functioning of a symbol is no more the origin of the thing which it is its function to symbolise than the forest in which a sign-post grew is the parental home of the town to which the sign-post points.

And I stress these arguments against the Husserl-Heidegger treatment of Meaning for two connected reasons :

(a) I think it can be shown that Husserl's theories of Meaning (*Sinn* and *Bedeutung*) are primarily developments of Brentano's theory of "ideas" (*Vorstellungen*). A Meaning is, at the start, just the intentional "accusative" of an act of "having an idea"; later the term also covers the intentional "accusatives" of acts of Judging, so that propositions as well as concepts are Meanings. Now (as Representationism always ends in Subjectivism) this theory has in the end to say that the world of things and events as *I apprehend it* must be just a tissue of Meanings, which Meanings must be the contribution of acts of consciousness.

(b) I think, too, that it can be shown that the only reason why Heidegger's Hermeneutic of "Dasein" takes or promises to take the form of a sort of anthropologicistic Metaphysic (smelling a little oddly both of James and of St. Augustine) is because Heidegger presupposes that the Meanings which his Hermeneutic is to unravel and illuminate must be in some way man-constituted.

But though I deplore the damage wrought upon his Metaphysics by the presuppositions which Heidegger has unconsciously inherited, I have nothing but admiration for his special undertaking and for such of his achievements in it as I can follow, namely the phenomenological analysis of the root workings of the human soul.

He shows himself to be a thinker of real importance by the immense subtlety and searchingness of his examination of consciousness, by the boldness and originality of his methods and conclusions, and by the unflagging energy with which he tries to think behind the stock categories of orthodox philosophy and psychology.

And I must also say, in his behalf, that while it is my personal opinion that *quâ* First Philosophy Phenomenology is at present heading for bankruptcy and disaster and will end either in self-ruinous Subjectivism or in a windy mysticism, I hazard this opinion with humility and with reservations since I am well aware how far I have fallen short of understanding this difficult work.

Sein und Zeit, it is worth mentioning, is most beautifully printed and the pages have generous margins.

G. RYLE.

Contributions to Analytical Psychology. By C. G. JUNG. London: Kegan Paul, 1928. Pp. xi + 410. 18s.

THIS book is a collection of essays, lectures and papers, written between 1919 and 1928 for a great variety of occasions. Two were published in volumes edited by Keyserling, two were published in the *British Journal of Psychology*; and the tone of voice is very different when we compare the two pairs. Where there is less restraint there is, on the whole, more of interest. Jung does not shine as a careful scientific psychologist: his province is 'Weltanschauung,' general aperçu, deep insight, and on this ground he is always interesting, though often very obscure.

The first of these essays, considered by the translators, who may here be congratulated on their brilliant piece of work, as "of the first importance" and even exhilarating, is of very little value. It is "On Psychical Energy" and deals with the plausibility of the notion of energy in psychology, emphasising the 'energetic' standpoint as specially requiring such a concept. As our language has been developed for practical, one might almost say, tactical purposes, we constantly have to look at things through the glasses of every-day external action, and we use language accordingly, recognising at the same time the strict incorrectness of our procedure; we speak of the 'back of the mind,' but we know all the time that there is no 'back' to the mind at all.

The concept of energy incorporates two notions: the notion of a flow, which is the projection of our feeling of continuity and effort into the observed phenomena, and the notion of balance, reciprocity or equilibrium. The latter notion is what Jung is emphasising when he speaks of the energetic view-point. Of course Jung is right in saying that this is merely a conveniently inclusive, embracing way of looking at things; ultimately, no doubt, it is a way of considering sequences and relations of numbers or 'pointer-readings'. He spends a great deal of time saying in rather tortuous language that 'really' there is nothing called energy at all, that there is a more-ness connected with a less-ness, so much here connected with an equal amount there, and an equal amount in one direction can be balanced by an equal amount in another. He believes, as far as one can judge from the earlier parts of the essay, that the whole point of the concept lies in that aspect of it which is concerned with reciprocity, with equilibrium. There are balances to be kept up: if you add more here you take away there, if you expend here you will find an equal amount there; but it must be seen that the future tense employed in the statement that the same amount of energy *will* always be there to be accounted for is all that can be indicated by saying that the energetic view-point is finalistic.

Psychology uses the word 'energy' in several ways. In the first place we want a word by means of which we can refer vividly to a succession of happenings which form a flow rather than a mere sequence, and we find it convenient to speak of this as a manifestation of energy. We feel effort, we project effort into a

stream of water as we see it, we introject the effortful flowing into ourselves to describe the stream of behaviour which constitutes the subject matter of Psychology. In fact the energetics of psychology are much more like hydrostatics than anything else. This flow-aspect of energy has not necessarily anything whatever to do with balances or equilibrium, and Jung uses it freely. He deplures the concretising of the libido (his name for psychical energy) on page 31, but on page 35 we read of the "damming up of the libido," and on page 42 we come upon the whole stream analogy in full flood with additional paraphernalia of turbines and canals.

A second use of the word 'energy' involves the concept of conservation. According to Freud the organism has so much energy in it, and this must be drained off. There is an amount of energy which has to be kept up, and the activities of the organism are concerned with its up-keep, and with the problem of seeing that it does not increase beyond a certain amount; there must not be too much or too little. If energy cannot find its way out one way it will find its way out another, hence symbolic activity and sublimation. The doctrine of such a balance between the organism and its environment is perfectly clear in Freud's teaching, and it is odd to find him being blamed for not having an energetic standpoint. But it is perfectly clear that the idea of a certain quantum of energy which has to be kept down to a certain level is in many ways different in its implications from the concept of physical energy. What is common and essential to both ideas is the notion of a fixed amount such that phenomena are discussed with reference to such fixity. In one case the point is that within a fixed amount changes occur which do not deplete the amount, in the other the fixed amount is maintained by a drainage system, and the idea of tension is borrowed when the drainage is blocked up.

A third use of the word 'energy' is, perhaps, at first sight, nearer the usage of physics, involving, as it does, alteration of expression with conservation of the total amount. This is Jung's use, and it has two applications. The underlying idea is that of a quantum in which there is a reciprocal alteration of emplacement. "When, for example, a conscious value . . . diminishes, or even disappears, one looks at once for the surrogate structure, in the expectation of seeing an equivalent value spring up elsewhere" (p. 19). It is important to notice that he is speaking of alterations within the amount in some sense, and not in the expenditure of the amount. There is another similar use. When the feeling attitude or process is unsatisfactory, "I withdraw as much libido as possible from the feeling process," and it seems to be directed, *i.e.*, the *same* amount, to the thinking process or to some other process. There is no description of what this means, and we are referred to the book on 'Psychological Types'. But whatever it does mean, the two fields of transference are quite different.

Some notion such as the integrity of the organism, or the equilibrium of the organism in its environment, with reference to which activity can be explained or predicted, is obviously useful, but the

essence of the whole matter lies in the unifying concept of organism rather than in any comparison which can be drawn between such a concept and that of physical energy. In psychology the energy concept is only natural when we wish to refer to exchanges between the organism and its environment, because that involves the feeling of effort, and when we ask ourselves 'what is it that makes us take up welfare work?' we reply that there is something that has to come out that way because it cannot get out any other. What is the something? 'Some form,' we say, 'of energy'. Now we conveniently and naturally use 'energy' there because we wish to refer to a flow, and also to a fixed quantum or equilibrium round the fixity of which phenomena are ranged. But inter-psyche reciprocities do not involve flow, and therefore it is not helpful to use the word energy of them.

The position seems to be that 'energy' conveniently figures in psychological exposition when either flow, or a mixture of flow and conservation are to be described, and all the time we must admit that we are using a very vague expression.

To take the notion too seriously is fatal. The idea seems to come into Jung's head in this way: energy involves conservation, and in books on the subject we read of tension, therefore we must find tension in human life. "From theoretical considerations also we could affirm the existence in children of such a tension of opposites. Without it there could be no energy, since, as Heraclitus has said, War is the father of all things." This is arguing like the Chinese. Surely the tensions of human life are quite different in their rules from the tensions of physics. The tension of a stretched piece of elastic cannot be described as involving a piling up of energy which seems to be the vital feature of those psychological situations where tension is spoken of.

But matters become worse when we drift from energy, through the energetic view-point, to finalism of a very different character. Sublimation is being discussed. We have the instinctive part of the child or primitive, and the restraining, organising, unifying 'spiritual' part. The direct end cannot be reached, a symbolic end is chosen, and that leads to something useful. There is a hint, not very clear, but certainly there, that this symbolic end, and its utility, are not chosen by chance. This kind of finalism has nothing to do with energy but characteristically it gets smuggled in somehow. It may be true that there is a directional tendency innate in the organism which makes it choose a symbol which leads to practices which will, in point of fact, be advantageous, but we should require more proof than has been vouchsafed. There are cases given where symbolic activity has proved useful, and has survived in its own right, but why should they not have been discovered by chance?

As we read on through the more general subjects—'Spirit and Life,' 'Woman in Europe,' 'Analytical Psychology and Education'—the value of Jung and the kind of psychologist of which he is a type becomes clearer; his own personality emerges and we are up against something vital, poetic and illuminating.

On page 151 we read: "When we trace a poem of Goethe's to his mother complex, when we seek to explain Napoleon as a case of masculine protest, or St. Francis as a case of sexual repression, there comes upon us a deep dissatisfaction. Such an explanation is insufficient and does not do justice to the significant reality of things. What becomes of beauty, greatness, and holiness?" This quotation displays at once the difficulty and importance of Jung. The difficulty is that we cannot all follow him in feeling the enormous importance for ourselves of beauty, greatness and holiness, in such a way that we mind very much whence they are found to come. To say that repressed incest is not strong enough to produce a work of art cannot help us much unless we have an independent measure of how strong repressed incest may be. But it is important that some one with the psychological insight of Jung, who does have such strong feelings on such matters, should seek for an explanation which he finds more satisfactory, and the very indignation to which some of his expressions give rise is enough to make us treat them seriously. The reduction of dreams, neuroses, and art to personal experiences and tendencies carries us a certain distance, but many people feel dissatisfied, and we find the word 'mere' creeping in—it is a 'mere' reduction. The fundamental question is whether this feeling of disappointment is itself a symptom of ungratified self-importance, or whether it has some objective validity. At times one approaches the rim of an uncomfortable circle. Jung feels that 'there is something more in it than that,' and invents the collective unconscious, the stream of eternal life of which we are but repositories, and feels that now he has a more satisfactory explanation; but is it that we have a more satisfactory explanation from an intellectual point of view, is it that we feel more respectable when our actions are related to a 'higher' or wider super-personal force, or do we intuit the eternal life because we are ourselves eternal? There is something more in it than that, because we want there to be something more in it than that, but we want it because there really is something more in it than that. The collective unconscious is a very useful hypothesis in the hands of Jung, and it cannot be denied that his uses of it are ingenious and interesting, but the mind is harassed with doubts all the time, and why should not our intuition of doubtfulness be as valid as Jung's intuition of truthfulness? The point is symptomatic of the modern psychological attitude; we look for ourselves reflected in our intuitions and beliefs, but the whole difficulty is that we are apt to be cleverer at seeing the reflection of others in their beliefs, while the face of Truth stares suspiciously often out of our own. Every blow which is struck at the objectivity of beliefs must necessarily unveil our own subjectivity. The only course to adopt is a kind of tolerant pragmatism. The question will then be: if I put on the Jungian glasses shall I be able to see connexions between phenomena which I could not see without them? If I adopt the conception of man, at once eternal and mortal, clinging to his mother as to the fount of immortality, the point at which the individual is

broken off from the super-personal stream, shall I be able to grasp a relation between, say, the criminal's undeveloped childishness and the myth of Osiris who wants to be born again? After reading Jung's works, including the one before us, we are convinced that such relations do become clearer, that by adopting his position we can put ourselves in the way of perceiving connexions which we could not perceive so easily, if at all, if we did not adopt that position. Of course this sceptical, utilitarian attitude to Jung's doctrines is quite different from that of their author. This is only to be expected; a view-point is seldom adopted and used to advantage without its inventor believing in it as something more than a view-point. In psychology we require two eyes, the magnifying, detail-seeing eye which often cannot see the wood for the trees, and the poetic, pattern-seeing eye which sees the general drift of things masked by the differences in detail. Jung has the latter kind of vision; his utterances have often a poetic 'psychological' truth about them, while at the same time they may seem to the scientist with the other kind of vision, reckless, unsupported and vague; and it is curious that the people who see the wood rather than the trees are almost always more passionate and violent about their vision than those who poke about for details and painfully string them together.

There is, however, a hint that the collective unconscious, which has hitherto been regarded as a scaffolding from the height of which we may be able to see the lie of the land, can be proved. "The existence of a collective unconscious is more easily disclosed in certain cases of mental derangement especially in *dementia praecox*. . . . Certain patients develop symbolical ideas which can never be accounted for by the experience of their life, but only by the history of the human mind" (p. 261). But in order to establish its existence we must have more evidence than is forthcoming. Of course it must be remembered that these papers were mainly written for non-technical audiences, with the result that, while they contain admirable résumés of Jung's position, useful alike for the psychologist and the lay reader, they are delivered *ex cathedra* and no questions answered.

In the course of them he describes his threefold conception of man—consciousness, personal unconscious, and collective unconscious—several times over, and also his theory of archetypes which spring from the accumulated experience of the human race; these and the theory of types, which has an admirable essay devoted to it alone, are the principal doctrines given in detail. On this background and with these concepts he treats of a variety of subjects. We have his views on woman, marriage, education, the love-problem of the student, and psychical research. To appreciate them fully one must either be already in his position, or put oneself in it.

There are, however, serious difficulties in understanding what Jung wants to say, which are clearly not due to the difficulty of putting oneself in his position, so much as to apparently conflicting

statements, which it should be perfectly easy to clear up. One of the most interesting of his newer views is that men and women carry about in them archetypes of Woman and Man; these are of the form of expectational dispositions, which are projected into ideals, and derived from collective experience. The man's archetype of Woman is called *anima*, and the woman's archetype of Man is called *animus*. So far we can be clear. But suddenly we find these words used of the female characteristics of man and the masculine characteristics of woman (on p. 171 the woman's *animus* is definitely called "her masculine rationalism"), and in the background we see looming up the doctrine that the unconscious is always compensatory, so that when man develops thought he represses feeling, and when woman develops feeling her unconscious is of a thinking character. We glide into the confusion on page 129 with the words: "As long as an archetype is not projected, and therefore either loved or hated in an object, it is identical with the individual who is thus forced to express it himself" and we are never told what happens when a man can project his *anima*, but still has a repressed feeling-unconscious because he has developed his thinking faculty. Is the unconscious his *anima*, or is the situation impossible? And then, again, when the thinking function is undeveloped in man or in woman it is supposed to be there somewhere under the surface. Does it mean that a thinking type consciously thinks in an undeveloped way? And if so, why say that he is an *unconscious* thinker? There is one point to be made about undeveloped conscious functions when other functions have been developed at their expense, and quite another point about actual happenings, which can be called thinking but which are not conscious, and which have certain characteristics of differentiation or its opposite, and we shall want to know how this last discrimination is going to be made in the case of mental events to which we have no access.

There is, too, a certain vagueness of expression which adds to our task in reading the book. In a paper read before the Society for Psychical Research he says on one page that the soul is something belonging to the ego, and that the loss of a soul feels to the savage "like an illness," while eight pages further on he says that "souls are complexes split off from and lost to consciousness". This is obviously not necessarily a contradiction, if what is not lost to consciousness is not a soul, and if it is shown that a complex split off from consciousness can be lost in a second sense to bring about a feeling of illness; but these bridges are not built and such difficulties do not seem to be felt. There are hardly any examples to help us, save in the Lectures on Education, and we follow after the author like a wicked and perverse generation seeking a sign of evidence. The book is stimulating and enlightening but it is the kind of book which must be read with sympathy, because its real value lies in its capacity to change our outlook, rather than in the imparting of any information, so that for it to take effect the mood, temperament and attitude of the reader are vital considerations.

W. J. H. SPROTT.

VII.—NEW BOOKS.

The Problem of Truth. University of California Publications in Philosophy. Vol. X. Edited by GEORGE P. ADAMS, J. LOEWENBERG, STEPHEN C. PEPPER. Berkeley, University of California Press, 1928. Pp. 263. \$3.25.

IN America at any rate philosophers seem to be bent on making up for their long neglect of the problem of truth, and the present volume is a handsome acknowledgment of its vital importance. It is composed of lectures delivered to the Philosophical Union of the University of California (apparently at Berkeley) in the academic year 1927-28, by the staff of the Department of Philosophy, reinforced by two distinguished visitors, in the guise of Mills Lecturers, as the α and ω of the program. Under the circumstances one might perhaps have hoped for a definite division of the subject among the participants, but in view of the notorious difficulty of philosophic co-operation a more systematic development of the whole topic was probably unattainable. Another general criticism is that the participants, though they all felt the need for investigating truth, find it about equally hard to emancipate themselves from the old correspondence and coherence notions and to put them in forms satisfactory, even to themselves. Still the volume certainly makes interesting reading.

Prof. Muirhead, as a 'Hegeleatic stranger,' sets the ball rolling with an essay on 'The Problem of Truth and some Principles in aid of its Solution.' While disclaiming intellectualism ("in a sense all philosophers if not pragmatists are voluntarists in these days," p. 8), and admitting that pragmatism has "taken hold of great writers" and "in a sense of a whole continent" (p. 15), and that "there are no absolute truths in the sense of truths which are not liable to modification" (p. 23), he yet clings to his three principles, (1) the peculiar "reality of the truth-experience," (2) "the internality and ideality of the ultimate criterion" and (3) the possibility of "approximation" to absolute truth.

Prof. Pepper's paper on 'Truth by Continuity' arrives, somewhat deviously, at the conclusion that "the truth of the proposition does not depend on its verification but only on the constant possibility of verification under proper circumstances" (p. 57). This, though it "has many affinities with pragmatism" (p. 58), is, he thinks, better.

Prof. D. S. Mackay writing on 'Æsthetic and experimental Truth' declares that "the virtue of pragmatism as a theory of truth was its recognition of the temporal and purposive character of knowledge" (p. 82), and suggests that essences are "experimental truths taken as objects of æsthetic appreciation" (p. 83), and convey "no truth or superior insight into reality" (*ibid.*).

Prof. W. R. Dennes investigates 'Practice as the Test of Truth,' but starts from the assumption that "neither to practical activity nor to perception nor to intuition can truth be ascribed" (p. 89), meaning apparently "an act is never in itself . . . true or false. . . . It is just what is" (p. 94). He speaks respectfully of pragmatism, but does not seem to have

got far beneath the surface, or he would hardly in the end assume that "simplicity as exhibited in a scientific system is aesthetic rather than practical, and is in any case no ground for a presumption of truth in the system" (p. 116). This is just intellectualist tradition.

Prof. V. F. Lenzen, a physicist, discusses 'Statistical Truth in Physical Science,' suggesting that "the concept of statistical truth was introduced in order to render possible the reduction of irreversible macroscopic processes to microscopic reversible processes" (p. 126), and concluding that "it seems necessary to await the solution of the quantum problem before it will be possible to decide whether elementary processes are subject to causal or statistical laws" (p. 140).

Mr. P. Marhenke has the courage to tackle 'The Problem of Error,' which he conceives as composed of "two independent problems, the problem of judgmental and the problem of perceptual error" (p. 143). He begins well by declaring that "an account of the meaning of truth, in order to be valid, must likewise be an account of the nature of falsehood" (*ibid.*). But it never occurs to him that what is true of judgment is no less true of perception, and that 'true' or 'infallible' perception should not be treated apart from 'false,' *alias* 'hallucination' and 'illusion' (not 'delusion'!). This omission completely spoils his otherwise ingenious discussion.

The next two papers are the most brilliant of the series. Prof. G. P. Adams, in 'Truth, Discourse, and Reality,' believes that truth belongs to beliefs, judgments and propositions alone, and inhabits 'discourse'. If its domain "with its occurring events and their immanent objects" is erected into "a self-contained realm" (p. 185), the correspondence theory results. But as its difficulties appear to be insuperable, he 'drifts' "in the direction of a coherence theory of truth," without "meeting its serious difficulties" (p. 204). The pragmatic theory he thinks has over-emphasised experiment. Experiment is "but the external means for knowing, a knowing which is itself never practice. Hence in making science, nature must be untouched and unaltered" (p. 187). Here the word 'external' seems to beg the question. But on p. 193 he comes very near to recognising the vital distinction between proposition and judgment (which would of course forbid philosophers to ascribe 'truth' indiscriminately to *both*) when he denies that 'Nero was the last Roman emperor' becomes "a bona fide judgment," even if he utters it. But he seems to confine "the claim to be true" to bona fide judgments, and to overlook the *formal* truth claim of judgment. It is, however, profoundly true that "unless some claim or venture is actually made and made in good faith, there is no possibility either of success or of defeat" (*ibid.*).

Prof. J. Loewenberg's subject is 'The Fourfold Root of Truth'. This is, he thinks, the root of the trouble, though he does not add that three of them are sorely afflicted with caries. They spring from four aspects of Judgment which is "at once personal, formal, noetic and material" (p. 215), and generates four theories of truth on the levels respectively of psychology, logic, epistemology and metaphysics (p. 213). (1) The psychological level generates pragmatic truth: "to de-personalize judgment is surely arbitrary. . . . Judgment implies a 'judge' . . . that judgment presupposes belief and belief a self is a fact which can be ignored but not denied. Judgments without individual minds voicing through them the various degrees and shades of their beliefs are entities as paradoxical as unbegotten sons" (*ibid.*). It is "the great merit of pragmatism to have recognized . . . the distinction between an asserted and an enacted belief" (p. 216). "A belief is true, not as asserted but as enacted . . . hence no belief can be pronounced true or false prior to its verification" (p. 217). (2) Pure formal logic, the "concordance of propositions divorced from

their psychological origin and their actual application" (p. 220), generates the coherence view. (3) Noetic truth, bare reference to awareness, makes truth wholly *intuitional*, excluding falsity. (4) For material truth "neither the judgment as description, nor the described object is true by itself; true is the span or bridge between them" (p. 222). Hence the correspondence view. In all these theories "the test of truth is ideal and elastic," though "pragmatism alone has the courage of facing the inevitable" (p. 224), and the rest "struggle in vain against incertitude and fallibility" (p. 225). To escape from "the paradox of a quartered truth" (p. 231) the only way is to regard the four elements as somehow one, and to ascribe to each "the power to absorb and transform on its own level the other three ingredients of judgment" (*ibid.*). This is shown convincingly in the case of pragmatism, but in that of the others only by substituting 'enacted beliefs,' the truths of the sciences, for 'pure' coherence, and by equating 'awareness' with experience, and 'description,' as "an act of double accommodation" (p. 236), with judgment. In the end "correspondence is the supreme test" and "the material import of the judgment is the most crucial," for the somewhat paradoxical reason that "metaphysical problems always demand and never achieve (!) solution by correspondence" (p. 239).

Finally Prof. W. P. Montague's essay on 'Truth Subsistent and Existential' may be regarded as an attempt to resuscitate the Platonic World of Ideas, not, however, with the purpose of "bringing the Ideas down to earth" but "to bring the things of earth up into the realm of the Ideas" and by conceiving "the category of existence" as "an inter-essential relational structure" (p. 256). It attributes "granite-like structures" to the world of subsistence (p. 259), and a total structure which "may be some day discovered by phenomenology and logistic working together" (p. 260).

This belief perhaps may underrate the postulatory vagaries of human ingenuity; but it would seem to be clear that the problem of Truth will long continue to provide philosophy professors with food—for thought!

F. C. S. SCHILLER.

The Use of Philosophy. By JOHN H. MUIRHEAD. London: George Allen & Unwin, Ltd. 1928. Pp. 208. 7s. 6d.

This book is a collection of addresses delivered in California at different times and on different occasions (the occasions being, I will make clear at once, not by any means all strictly academic). It is attractive by reason of its direct simplicity of style and its obvious sincerity of conviction, and it has the added grace of a wealth of quotations gathered from a wide range of reading and introduced with an unflinching appositeness. In such a work one does not expect the systematic exposition of a theory: but the common standpoint from which the different chapters are written, and the thread of a single purpose which runs through them all, enable us to regard them as a book, and not merely as a collection. The book is, in the strict sense of the word, an *Apologia*. Its aim is, from one standpoint or another, to justify the Ideal against the "merely" Real; to vindicate for the world of the "Eternal Values" (p. 38), which the poets have seen and the mystics felt (*v. esp.* p. 127), and the great philosophers, each in his own way, have grasped (21, 102), a reality, no doubt different from, but *superior* to that of the world of the "merely temporal values"; and finally to defend Philosophy, as a pursuit of these values, against the criticism of those whose life is devoted to the pursuit of the useful (Chaps. II., VII.).

It is the book of one who is sincerely anxious to convert, and I am not

qualified to judge how far it is likely to be efficacious for this purpose, but I am sure that it will strike a chill of dismay to the hearts of some who had believed themselves beyond the need of conversion. If a soldier, believing the battle to have been decided and proceeding serenely towards the distribution of the spoils, is suddenly recalled by a ringing cry from his own ranks 'All is not lost; the last ditch may still be held and the right shall yet prevail'; he may be pardoned if his first reaction is a feeling of acute depression. So the sympathetic reader of these pages finds himself assailed as he proceeds by the growing doubt: 'Would a position which was quite defensible be defended quite like this?' This doubt is heightened by that very practice of quotation (especially quotation from the poets) which we noticed above, and which is common with Prof. Muirhead to other Idealist philosophers. "Ce qui est trop bête pour être dit, on le chante"; and the suspicion is not quite unwarranted that these philosophers act on a somewhat similar principle, in availing themselves of poetic expression for those parts of their doctrine which it would embarrass them to state in cold prose. And when it appears that the defence of the "eternal values" is grounded indiscriminately upon the testimony not only of the poets but of the mystics (see 126-127); when appeal is made on their behalf now to the "faith" of Plato (40), now to our feeling of "something more which makes 'all the difference'" (96, cf. 28), or of "something that wells up from within the best things that we know in life" (107); when philosophers are called "seers" and metaphysics "a kind of vision" (47); when in short the whole case is found to be based on an appeal to subjective experience, to the longings, feelings, visions and 'ideals' of individuals, whether ourselves or the great seers of the past, the most convinced Idealist can hardly resist the conclusion that Mr. Bertrand Russell was right (32, 133) and that the introduction of these subjects into Philosophy can lead only to an inconclusive strife of individual sentiments, in which one man's 'vision' is as good as another's.

The truth is that Prof. Muirhead, for all his protestations to the contrary, has not got beyond the dualism of real and ideal, which was the special problem of the eighteenth century. His "ideal" is thought throughout in opposition to the real, it comes to us in gleams from another world, as the "reflection of an order that has no place in the physical" (77, cf. 62, 65, 66; and 128, where it is taken for granted that the pursuit of ideal values must be undertaken in the teeth of "the world"). From this standpoint affirmation of the ideal involves repudiation of the real and *vice versa* (see 136-137), and thought is condemned to a barren oscillation between two equally unsatisfactory alternatives. "In this way the world seems to fall into two . . . the world of fact and the world of values. Science appropriates the one, and lets who will take the other. There is no harm but every advantage in this severance." . . . But the devotees of science must not "go on to treat what lies outside of what it has selected as the field of fact as without reality of any kind" (135-136). But this prohibition is futile. Accepting Prof. Muirhead's delimitation, not only the devotees of science, but all other clear-headed men must do what he says they must not. The objects of science, and nothing else, are real in the proper sense of the word and apart from evasive qualifications like "ultimately" and "in the end".

The objects of science are real. But what are the objects of science? For Descartes (and for any evidence I can see to the contrary for Prof. Muirhead too) science comprised little more than mathematics, physics, mechanics, astronomy and the beginnings of chemistry, *i.e.*, the sphere of scientific knowledge was roughly coterminous with the material world. For Kant it was much the same. Between Kant and Hegel set in one of the momentous developments of the history of thought. In this interval

were founded the first sciences of 'objective spirit'—the science of economics by Adam Smith and the science of positive Law by Montesquieu (Kant was over twenty when the "Esprit des Lois" appeared). Since Hegel, the range of kindred investigations has been extended with incredible rapidity. The sciences of Philology, 'comparative' mythology, comparative study of religion, histories of art, science, and historiography and the like have subjected to systematic investigation the whole world of spirit and thus added a new province to reality. Language is no longer to us, as it was to Hobbes, composed of words "taken at pleasure to serve for a mark," it is a *body* or fabric or system, whose laws are accessible to reason. A myth is no longer, as it was for the "Aufklärung," the arbitrary invention of a deceitful priest, but is seen to have a necessity of its own. History itself is no longer valued merely as a tale that "makes the heart Beat high, and fills the fancy with fair forms," but has become (for some at least) the object *par excellence* in which systematic (*i.e.*, scientific) investigation can find itself at home.

Thus it is a false antithesis which sets "the spiritual" on one side over against the "objects of science" on the other; and the Spirit, in so far as it has become the object of thought, can dispense with the testimony of faith.

I do not mean to suggest that a recognition of these facts will solve automatically all the philosophical problems which centre round the conceptions 'real' and 'ideal'; but I think it is clear that it renders out of date and worse than futile that presentation of the problem to which Prof. Muirhead adheres, and of which the characteristic feature is that in it the division between real and ideal is conceived as coincident with that between material and spiritual.

These considerations throw light upon the problem raised in the title of this book. Philosophy itself possesses a substantive reality which qualifies it to be the object of systematic thought; it becomes an object to itself in the History of Philosophy. This study reveals an objectively existing fabric of human thought and understands its development. For Prof. Muirhead the History of Philosophy is nothing but a succession of flashes out of the Empyrean, of varying degrees of brilliance—*i.e.*, it is not in any intelligible sense a history at all; and consequently "each has to find his philosophy for himself" (20). It is true that we are told that we can get "help" in doing this from those who have had one in the past, but it is by no means made clear how this is possible. It is a consequence of this, that while Prof. Muirhead suggests for Philosophy a great variety of "uses"—she is to criticise life (15), she is to "insist upon Democracy as the name for short of that freedom and power of *self-government*, which, etc." (39), she is to be the conscience of the age (48) and a "rebel against all creeds" (69), is to "separate that which is essential to the reality of religious experience from the external forms and adjuncts which have got mixed up with it" (93), and so on—the one suggestion which does not commend itself to him is that she should continue to philosophise; that is to say that she should devote herself to the understanding and development of that existing fabric of thought which is the objective side of herself. "Philosophy is the History of Philosophy" was one of the profoundest remarks of the nineteenth century. We have no space here to indicate how understanding in this sphere necessarily implies, is indeed literally one with, development; it will be more readily conceded that development at least *presupposes* understanding of that which is to be developed, and that philosophy has no need to go seeking odd jobs about the universe until she has made herself far more thoroughly mistress of her own inheritance.

It may, finally, seem ungracious (especially considering the occasions of delivery of some of these addresses) that we have laid to the author's charge, as philosophical vices, some of those very features of his work, which, from a literary point of view, contribute much to its adornment. But Philosophy is not a branch of Belles Lettres. There have been (and are) those who have found the profession of Idealism compatible with the severest rigour of thought, and it is due to them that the name should be freed at all costs from the association (which it has undoubtedly acquired for many minds) with an undue reliance upon 'reasons of the heart'.

MICHAEL B. FOSTER.

Über das Haben. Sieben Kapitel zur Ontologie der Erkenntnis. By GÜNTHER STERN. Friedrich Cohen, Bonn, 1928. Pp. 190. M. 9.50.

This book is not so much a single treatise as a collection of essays on different though connected problems. We must not therefore expect the explicitness and coherent system required in a continuous account, but it shows very great ability in handling the conceptions of metaphysics. The most important concept for the author's thought is that of "having" or "owning" (*das Haben*), of course not in the economic sense of the term. He would found a metaphysics not on "being" or "knowing" but on "having," thus avoiding the difficulty which besets all philosophers, of passing from the inner to the outer world. As a primary datum we must take the fact that we "have" or own a body, and this consciousness of "owning" it is sufficient guarantee of its real existence. But we "own" other things though in a less intimate sense, and so we pass through a series of varying degrees of intimacy to things which, while in some degree used and therefore "owned" by us, present us with that peculiar combination of familiarity and difference which is the distinguishing mark of external "Nature". This development of the conception of "das Haben" seems to be the principal thesis of the book, but how the author would work it out in such a way as to meet the special problems of epistemology is none too clear. A number of interesting subsidiary but still very important problems are treated besides.

The first chapter deals with the conception of "Echtheit" (a word which in the context is hardly capable of translation but is perhaps best rendered "genuineness"). It is a term common both to men who are trustworthy in the moral sense and to appearances which give us what is really there and do not mislead, and the author tries to work out the common principle as shown in its many different meanings. The second chapter on "Sichtbarkeit" (another untranslatable word) tries to analyse the characteristics involved in a thing's being given or presented to us either in a sensible or an epistemological sense; the third chapter discusses further the concept of Nature; the fourth brings out the fundamental idea of "having"; the fifth and sixth employ this concept in analysing time and space respectively. The basis of the consciousness of time, the author insists, is a psychological purposive unity; we are not conscious of "possibilities" because we are temporal but are temporal because we are conscious of "possibilities," the present is not a geometrical point but that content which we "have" before us as a unity. Again, the consciousness of space is explained as developing from the consciousness of our own body. Finally, the last chapter deals with language and maintains strongly the view that its meaning must always depend on the context, the present situation. In illustration of this point the author puts forward the interesting contention that the three "persons" of grammar represent an irreducible difference which we ought not to ignore by reducing all propositions to the form "S is P".

The book is open to one rather serious criticism. While making due allowance for the difficulty of the subject I still feel that it ought to and could have been made much clearer, and this lack of lucidity is bound to be an obstacle to the recognition of the views in question, especially as it involves a certain vagueness in even the fundamental conceptions like that of "having". But in spite of this the study of the book remains very well worth while; it is a work of great ability and, though the author sometimes allows himself to be carried away by superficial resemblances in the use of language, it handles a number of important concepts in a masterly and instructive fashion.

A. C. EWING.

A Modern Theory of Ethics. By W. OLAF STAPLEDON, M.A., Ph.D.
Methuen & Co., Ltd., London. Pp. ix, 227. 8s. 6d. net.

"In this book," says Dr. Stapledon, ". . . my chief aim is to envisage in the light of biology and psychology the basic ethical problems" (p. 13). To many this may seem an unpromising introduction. It is often felt that writers who approach moral theory too exclusively from the side of biology and modern psychology do not so much re-state as ignore the great historical problems of ethics. Such a criticism does not, however, touch Dr. Stapledon; and perhaps the main theme of his book will become evident when we see why, for him, a modern theory of ethics is necessary.

The author does not believe that ethics can really be divorced from metaphysics, and in his Introduction he suggests that present-day intellectual scepticism and 'emotional disillusionment' would not be so prevalent if moral practice and theory were clearly consistent with modern cosmology. It is not every philosophy which attempts to exhibit this consistency. On the one hand, moralists who connect ethics with politics rather than with metaphysics are content to leave ultimate issues alone, as more or less irrelevant to their enquiry. On the other hand, the Idealist, while insisting upon the connexion between ethics and metaphysics, gives Consciousness an important place in the scheme of Reality, regards the universe as essentially 'spiritual,' and is thus enabled, with a fair degree of propriety, to fit his moral ideas into the mould cast for them by ancient and mediæval thought. It is for modern Realists and 'philosophical materialists' who cannot divorce ethics from metaphysics, but do regard 'the good-bad distinction' as objectively valid, that the problem has become pressing. They have to re-think moral experience in terms of modern knowledge.

This (if I do not misinterpret him) is Dr. Stapledon's aim. He hopes to effect a union between practical Idealism and theoretical Realism, and attempts to reconcile extremes in contemporary thought by stripping opposing doctrines of their unessentials. Having studied in many schools, his criticism of historical theories, though naturally coloured by his own views, is essentially fair-minded. His interest in modern speculation on the one hand, and, on the other, his ability to move freely in the realm of 'classical' ethics, have enabled him to look at old perplexities from a new angle.

Perhaps the most notable part of the volume is Dr. Stapledon's re-statement of the problem of value in terms of his interesting theory of teleological activity. He begins by examining two theories of 'good'—the views of Prof. Moore and Prof. Field—and then develops a mid-way position which, he believes, unites the most important elements of both. Prof. Field is right in supposing that *teleological activity* is implied in the existence of 'good,' but Prof. Moore is right in denying that *mental*

activity or Consciousness is implied, because teleological activity is not essentially mental. Consciousness is a subordinate element even in volition. All conation is based on cognition of a need or *tendency* to behave in a certain way, and while this tendency is teleological, it does not necessarily involve consciousness. It is not possible to state adequately Dr. Stapledon's view in a short paragraph, but that its implications are far-reaching must be evident, and the reader may find a comparison with Spinoza's conception of the 'conatus' suggestive. This comparison with Spinoza may indeed be extended to embrace the subsequent discussion on the cosmical significance of the moral ideal (Chapter XII.).

Considerable space is devoted to an account (on the basis of the earlier argument) of the 'aesthetic judgement' and allied subjects.

This notice has dealt rather with the subject than the contents of the book, for a reason. Something about Dr. Stapledon's style suggests a certain lack of vigour and keenness of thought, and on points of detail (e.g. pp. 52, 91 and 94) there are, I think, some inaccuracies in reasoning. These defects seem even emphasised by the very merits of the book—its mature moderation and impartiality—and may deprive it of the attention it ought to secure. But Dr. Stapledon's modern theory of ethics is obviously the fruit of deep reflection, and, as many will be interested in his contribution, it seemed best to devote most of my available space to this account of the general problem of his work.

W. D. LAMONT.

Science and the Religious Life: a Psycho-Physiological Approach. By CARL RAHN. New Haven: Yale University Press. London: Humphrey Milford. 1928. Pp. vii, 221. 13s. 6d. net.

This is an American book, and reflects the relations between science and religion in that country in a way that it is difficult to believe is typical, for we are told that by way of rapprochement "a prince of the church considers seriously the advisability of subscribing to the doctrine of evolution," and "scientists express the conviction" that religious enthusiasm will find a fresh and adequate outlet in a programme of eugenics and sterilisation of the vicious and unfit. Yet it would be difficult to find on this side of the Atlantic a "College professor" who could sketch a technique of prayer like that quoted by Mr. Rahn from the *Atlantic Monthly*, which prescribes the following: "for money troubles, realise: there is no want in Heaven, and turn in thought to 1, 2, and 7 in exercise 1".

Under the circumstances Mr. Rahn's dove of peace seems likely to find a precarious foothold only. But apart from its chances, if one asks what is the essence of Mr. Rahn's eirenicon, it is somewhat surprising to find that he has succeeded in transforming Naturalism, the enemy, into an angel of light. Physiology is the instrument which does this. For example, the difference between the teaching of Jesus and that of the Upanisads is due to the different kinds of "emotive states" in the ardent young teacher of Galilee on the one hand, with His "adolescent emphasis on loving fellowship," and the mature and more elderly sages of India with their "kindly tolerant aloofness from our common humanity". These states depend upon physiological conditions and "can now be understood in physiological terms without recourse to metaphysics". Incidentally one wonders if Mr. Rahn recollects that the Buddha is said to have been much the same age as Jesus when he received his revelation; and what physiological difference would explain the difference between the Sermon on the Mount and the four Noble Truths?

However we learn that the "physiological processes that are basic to our attitudes, behaviour-tendencies, and our active purposes . . . possess

a certain dialectic or logic of their own". "Human history is woven not by the logic of ideas, but on the looms of the deep-moving appetites and impulses and desires that possess a dialectic of their own." This might seem the most naked Naturalism, for though Mr. Rahn talks at times about psychology and psychophysiological functioning, physiology is always the dominant partner. Yet just because it is so, we must realise, he says, that biologic evolution is the creative force producing the religious life and all the higher values. Since there is no reason to assume that evolution has come to a stop with man, a boundless future is possible. Behold then in Naturalism not the enemy, but the new God.

Mr. Rahn has to skate over some thin ice, which he does with commendable celerity, in the course of his argument. The following example will serve. "Latterly the studies in the constitution of the germ-plasm as the carrier of the constellation of the 'traits' passed on to the next generation, are pointing in the direction that the temporary balance of the organic and chemical processes in the body is part-determiner of the particular constellation appearing in the germ-cell: the character of the offspring may come therefore to be in part determined by the mood, the feelings, the organic trends in impulse and desire that enter at the time into the constellation of dominant character traits in the parental organism. This physiological conception is portentous in its possible bearing on human striving and human destiny." "Humanity Transfigured" will therefore come when mankind really wants it. Mr. Rahn gives no biological authorities for this somewhat stupefying conception of the result of 'studies in the constitution of germ-plasm,' possibly for good reason.

Mr. Rahn is serious and earnest enough, but very much more positive evidence, and very much closer attention than he gives to obvious and weighty objections, will be necessary before the hypothesis that explains the religious life in terms of anabolism and endocrine processes, can be regarded as a serious contribution to its elucidation.

E. S. WATERHOUSE.

Platonism. JOHN BURNET. University of California Press, 1928. Pp. 130.

It will be but a melancholy pleasure to students of Plato to read the lectures delivered in the University of California in 1926 in which Prof. Burnet says the last words he was to utter on a subject which he had made so specially his own, and on which it is plain he would have had a great deal more to tell us, if his life and health had lasted. The object of the course is to attempt a provisional solution of the question which had long absorbed the author's attention: What were the respective special parts of Socrates, Plato, Aristotle, in the formation of the philosophical interpretation of the world which is the great legacy of Greek thought to mediæval and modern times? In the main Burnet's answer to the question had been given in his volume, *Greek Philosophy from Thales to Plato*; the present smaller work summarises the conclusions there reached for an audience who could not be expected to have studied the book on *Greek Philosophy* in detail. This, no doubt, largely accounts for the very frequent close verbal correspondence between the two volumes. Still a mind as alert and active as Burnet's could not even travel a second time over familiar ground without throwing out numerous happy fresh suggestions, and I propose therefore to devote the rest of this notice to calling attention to some of these suggestions which may be more or less novel to readers of the earlier book.

It is a good point, never so clearly put by the author before, that the

reason why Socrates wrote nothing is a very simple one; he belonged, as is too often forgotten, to the age of Pericles, and the men of the Periclean age did not write books (p. 2, etc.). I think Burnet is not exaggerating when he says that if Plato had not had the happy inspiration to write Socratic dialogues, we should have known as good as nothing either of Socrates, or of the general intellectual conditions at Athens in the time of Socrates. (It must be remembered that Plato was, to all appearances, the inventor of the dramatic dialogue as a literary *genre*, and that Xenophon, in particular, was later in the field and received the impulse to publish his reminiscences and anecdotes from the example of Plato and Æschines.) When these facts are borne in mind, there is a manifest presumption in favour of the view, admirably stated by Burnet, that Plato's object in inventing a new species of dramatic literature can hardly have been anything but to preserve for future ages a living picture of the days in which Athens had really been great; and this has to be remembered when we are asked to believe that he disguised himself, his own associates, and his rivals under the "masks" of Socrates and other well-known personalities of an earlier generation. (I think the case might be strengthened by a consideration of what Plato tells us in *Ep. VII.* of his own state of mind in the years after the death of Socrates. He had been driven from his aspirations to a statesman's career, with a heart broken by the conviction that there was no place left at Athens for a true statesman. Apparently it was partly to cure his own heart-break that he took refuge from the actual world in memories of the earlier and better times, and this is, on the face of it, a good reason for believing in his picture.) It will be a new suggestion to most of us that the *Republic* and *Timæus* are intended as pictures of the intellectual life of educated circles at Athens *before the outbreak of the Archidamian War* (p. 25). Though Burnet speaks very confidently on this point, I own to some misgiving about it. So far as I can see, if the *Timæus* stood alone, the theory would be possible, but we have to take the *Republic* into account too. My difficulty is that Burnet, in my opinion very rightly, accepts *Ep. XIII.* as a genuine letter written in the year 366. (He acutely remarks at p. 68 that the doubts of eminent German scholars are really due to failure to understand that the letter is strictly private, and written in a situation in which tact and reticence were all-important.) Now from *Ep. XIII.* we learn that Plato's mother was still living as late as 366. But if she had two sons who were young men already distinguished for their valour in a battle fought before the year 431, must she not have been several years over the "hundred mark" in 366, and though this is not demonstrably impossible, can we say that it is likely?

In connexion with the peculiarities of the style of Plato's latest dialogues, there are some admirable remarks on page 55; I do not know whether anything of the kind has been suggested before, but what comes as a novelty to me may be equally so to others. It is observed that there was a real object behind the Isocratean trick of avoiding *hiatus*, carefully copied by Plato in the *Sophistes* and all later dialogues. The purpose is to relieve the monotony due to the paucity of consonantal terminations in the Greek language. As Burnet says, this monotony does not exist in English or German, and it follows that English or German readers are not quite competent judges on the question whether the price Plato had to pay for avoiding it by what are, to our ears, harsh inversions of verbal order was unreasonably high.

I find the whole account of Plato's relations with Dion and Dionysius II. more admirable than any given us by other contemporary scholars, and, I think, in some respects, than Burnet's own earlier excellent account in *Greek Philosophy*. The description of Dion as the "half-converted tyrant"

seems to me extraordinarily true both to the historical record of his career and to the illuminating occasional remarks of Plato himself about Dion's points of strength and weakness in the *Epistles*; and it needs to be borne in mind if we are to make the proper allowances for the unfortunate, though well-meaning, Dionysius. It is a happy thought, too, and very characteristic of Burnet, to dwell on the singular contrast in position and temperament between Dion and the young Ionians who composed the main body of the Academy in Plato's later years. Also I think no one before Burnet has laid sufficient stress on the facts that Dionysius was really deeply attached to Plato, and (p. 78) manifestly had real mathematical ability. We have to remember these things before we decide that Plato was "unpractical" in the scheme he adopted for the young man's mental training, or in hoping for possible good results from his last voyage to Syracuse. What is more important, Burnet is careful, in his whole picture of "Plato in the Academy," to keep well to the front the intense depth and reality of Plato's interest in statesmanship. No other writer, so far as I know, has sufficiently insisted on the point that to the last the wise statesman was Plato's ideal; that is why he devoted his old age to the composition of the *Laws*, which I should agree with Burnet in calling his "greatest work." Burnet's picture of the surprise the Ionians of the Academy must have felt at their Master's intervention in the current political troubles of Syracuse appears to me very much more near the mark than Jaeger's vision of the ideal of the *βίος θεωρητικός* as a reflection, in the mind of the Academy, of the practice of Plato. I am glad also to see that at page 78 Burnet defends the authenticity of the *Epinomis*, suggesting, very plausibly, that its peculiarities may be understood if it was dictated by a very old man, struggling with bodily and mental infirmity.

There are two rather important points on which I could wish that Burnet had been able to give us the benefit of "second thoughts". At page 100, in an interesting account of Theætetus, Theætetus is credited with having in mere boyhood "got over the trouble about irrationals". I am afraid I do not understand what can be meant. All that we are told of the young Theætetus in the dialogue called after him is that he and his companions made a *διαίρεσις* of *γραμμαί*. They divided them into two classes, those whose squares can be represented by a number of units of area resolvable into two equal factors, and those whose squares cannot be represented thus (*μήκη* and *δυνάμεις*). It certainly was a useful result to provide each of these classes of "lines" with a technical name, but I do not see that any problem is solved by doing so, least of all the problem, to which Burnet refers in the context, of including "irrationals" among numbers. Again at page 107 Plato is credited in so many words with having recognised the sun as the centre of the planetary system, on the strength of the well-known statement of Theophrastus preserved by Plutarch. It is forgotten (1) that Theophrastus only says that Plato put the earth out of the "centre," not that he put the sun in, and (2) that the *Epinomis*, accepted as genuine by Burnet, expressly makes the sun a planet, like the rest. These "appearances" must be explained somehow by anyone who wishes to make Plato into a "precursor of Copernicus". (Of course I do not mean that Plato believed in a stationary earth; that is sufficiently disproved by the words of Theophrastus alone, and there is other evidence. But does not everything indicate that he believed in an invisible central luminary round which the earth revolves with a period of twenty-four hours?)

It is interesting to hear Burnet's "last word" on Aristotle (p. 61) to the effect that his real originality and greatness lay almost wholly in biology, not in astronomy, physics, or politics. This seems to me sub-

stantially true; in view of the exaggerated deference often paid to the *Politics* in particular, I think Burnet right in dwelling on the curious inability displayed by Aristotle to understand the ideas of Philip and Alexander; he never seems to have grasped the fact, thoroughly appreciated by both Isocrates and Plato, that, for good or bad, the immediate future of civilisation would depend on the revival of monarchy. One other remark about Aristotle I find curiously penetrating, the observation (p. 111) that while Plato was "reluctant to express his beliefs on certain subjects in writing"—presumably because he felt that they could be at least only tentative—"Aristotle had no such reluctance," and that this goes a long way to account for the "curious amalgam" known as Neoplatonism.

A. E. TAYLOR.

Plato's Theory of Ethics: The Moral Criterion and the Highest Good.

By R. C. LODGE. London: Kegan Paul, Trench, Trubner & Co. 1928. 21s. net.

Prof. Lodge explains in his Preface that he is not interested 'in Plato himself, the fourth-century Athenian, in the obscure problems connected with his personal history, in the motives which led him to write, in the intentions behind the publication of Dialogues so very different as the *Protagoras* and the *Parmenides*, and in the personal evolution of his views—in short, in all the questions which especially interest philologists'. His object is, eschewing historical and philological problems, to find 'a single system of dialectically consistent meanings which would throw a very clear light upon the meaning of any passage in the Dialogues which fell within the field of investigation'. He perhaps under-estimates the interest which the problems he eschews present to others than philologists; and it must be admitted that his book, divested as it is of any discussion of such problems, such as makes the works of Profs. Burnet and Taylor such lively reading, is a little lacking in relief. To get our criticisms over first, it may be said that the very elaborate scheme of discussion of Platonic doctrine which he follows leads to a certain amount of repetition which might have been avoided; Plato's attitude on each main subject is perhaps canvassed from rather too many points of view, when a more selective method would have been more effective.

It must be admitted, too, that his interpretation of Plato's metaphysics is much more questionable than his interpretation of Plato's ethics. When for instance we read that 'each Idea, e.g., the Idea of Bed, or the Idea of City, in the absolute sense, is the whole of God's mind' or that 'an Idea is never a mere thought' (italics mine) or that the Idea 'is far more than merely cognitive' (p. 159), or that 'the Idea is a clearer and more profound experiencing of reality than is the vacillating and shifting sensuous and emotional types of experiencing' (p. 171), it seems clear that the writer is attributing to Plato a confusion between, or else a deliberate identification of, subjective and objective, which is not really to be found in Plato.

But when this has been said, it remains to thank Prof. Lodge for the most exhaustive and philosophically the most ambitious account of Plato's ethics—and incidentally of much of Plato's metaphysics—that has yet appeared. He evidently knows the whole of the dialogues from end to end with minute accuracy. He is able to confront passage with passage and to show with great skill the unity of essential doctrine that underlies different dialogues in which Plato presses nearer and nearer to the heart of his problem. He is able to show, in many instances, how distinctions drawn at rather a low level of thought in some early dialogue acquire

greater richness and significance as Plato's thought matures. And through all his exposition he never loses his enthusiasm for Plato as one of the world's greatest spiritual teachers.

W. D. ROSS.

Platons Selbstbiographie. H. GOMPERZ. Berlin und Leipzig. W. de Gruyter & Co., 1928. Pp. 46. M. 3.

Mr. Gomperz's pamphlet, described as a kind of introduction to a contemplated work on the Platonic philosophy, is another example of the widespread effect on German scholarship of Wilamowitz's recognition of VI., VII., VIII. as genuine "epistles" of Plato. We are given an excellently done "free translation," judiciously abbreviated in places, of *Ep. VII.* with some brief introductory remarks on the circumstances of the composition, and a discussion of the light thrown by the document on the character of Plato as a man and a thinker. In the introductory remarks everything seems to me admirable except the suggestion (p. 8) that there was something "erotic" in the relations between Plato and Dion. This seems to me out of keeping alike with the circumstances of Plato's first acquaintance with Dion, as described in *Ep. VII.* itself, and with all we can really infer from the Platonic corpus about the personal temperament of Plato. I do not see that the epigram on Dion ascribed to Plato proves anything, even if it is genuine. The translation is skilfully done, and in view of its avowedly "free" character, it would be a little pedantic to suggest that occasionally it imparts a touch of rhetorical exaggeration into the text, e.g. (p. 13) *mit einem Feureifer* for *διαφερόντως*, (*ib.*) *höchst unbeliebt* for *ἐπαχθέστερον*, "not exactly *persona grata*". I feel sure that on page 27, in the rendering of the difficult passage about the difference between the *τί* and the *ποῖόν τι*, the translator's identification of the *ποῖόν τι* with *sinnliche Erscheinung* misses the mark, but the point could only be discussed in connexion with a systematic inquiry into Plato's epistemology, a matter not dealt with by Mr. Gomperz. As to the inferences drawn from the epistle, I am sure Mr. Gomperz is right in saying that it presupposes that Plato, at the time of his first visit to Dionysius II. (367), is already a "teacher" with a definite "doctrine" to which he attaches great importance, and that *Ep. VII.* of itself disposes of the view that what Aristotle describes as "Platonism" is a "senile aberration". This point is put by Mr. Gomperz in a very convincing way. I am less impressed by the inference that Plato was personally something of an "unpractical" *Herr Professor*, who exaggerated the degree of personal influence he possessed over the young prince, and would probably have made a worse "mess" of things as a ruler than Dionysius himself. I do not think we know enough of the actual situation and the personages involved to presume that our judgement in such a matter must be sounder than Plato's. After all, he knew Dion and Dionysius personally, and we do not.

A. E. TAYLOR.

A History of Modern Philosophy. By H. W. DRESSER, Ph.D. London: Allen & Unwin. Pp. xiv, 471. 15s.

It is a common complaint that in university courses modern philosophy ends with Kant. The real reason for this seems to be not that we still feel too near the subsequent thinkers to view them in perspective but that to pass beyond Kant involves the encounter with Hegel, whom few of us ever read and even fewer understand. If only Hegel could be read in less than a lifetime and be expressed in the language at a normal man's disposal, we should gladly run forward to the many interesting thinkers that

sprang up after him in many parts of Europe and in America. As matters stand students have little or no knowledge of the course of post-Kantian philosophy, and hitherto they have had no single text-book in English from which to gather it.

Dr. Dresser's book fills the gap. True, it starts with Bacon, but for the period between him and Kant there are already text-books enough, and Dr. Dresser has wisely devoted a full half of his space to the post-Kantians, realising that in his inclusion of them lies his justification. The survey is carried down to Eucken, Bergson, the American New Realists and Alexander, and no intervening name or movement with any claim to importance has been omitted, with the exception of Neo-Scholasticism, which is surely now sufficiently vigorous and extensive to deserve mention. Throughout, the attitude of the author is dispassionately expository: each system or movement is outlined, its historical colouring touched in, and its debt and legacy indicated. Unfortunately the very excellence of the book gives it a defect. Completeness has been bought at a price: with some happy exceptions, for example the chapter on Leibniz, the outlines read like *présis* or catalogues, series of compressed sentences with the links of thought left implicit. The defect is all the more grave in that the book is clearly intended for relatively elementary students, who again and again will find what a man said without being helped to see why he said it. The following extract from the chapter on Alexander is one of very many instances: "The body is a percept in which various *sensa* or sensed elements and corresponding ideational elements are revealed. The bodily person is the beginning and type of all forms of the self. The body is experienced as an instrument of the mind. Certain processes occurring in specific parts of the cortex are vital for a particular sort of mental event. The direction of a mental process is that of its specific anatomic or physiological path" (p. 439). The illuminating word that gives the source and reason of such tenets is lacking. If students are to be taught the history of philosophy in this way, the sooner the subject is dropped the better. The prime requisite is not that they shall remember but that they shall understand, and when they have understood they will both almost inevitably remember all that is essential—the seed that will regenerate under their own reflection—and be able to reproduce it with the simplicity and verve of their personal idiom instead of hurling it out as a clatter of lifeless jargon.

But though the book is a cram-book, it has been written with a wealth of patient labour and conscientious care. The outlines, within their narrow limits, are materially accurate, and the bibliographies have been compiled with genuine discrimination, though one misses books like James Seth's work on the English philosophers, Laurie on the Scottish, Nicholl on Bacon, and Gibson on Locke (on p. 90 Stephen's *English Utilitarians* has presumably been displaced by the double inclusion of his *History of English Thought in the Eighteenth Century*; on page 224 "Selbie" should be read for "Selvie"; and the Italian titles of two of Croce's works contain mis-spellings). The index too is very full.

T. E. JESSOP.

La Filosofia di Tommaso Hobbes. By ADOLFO LEVI. Milan, 1929.
Pp. 423. L. 20.

It is not long since Mr. Levi gave us the most thorough and carefully documented of studies of the philosophy of Francis Bacon. He now follows up the work, as he promised in its Preface, by an equally excellent monograph on Hobbes. Four of his sixteen chapters are given to an

examination of the origins of Hobbes's doctrine, and its metaphysical and logical presuppositions, the remaining twelve to the doctrine itself in its threefold subdivision as a philosophy of body, of man, of commonwealth. I do not propose to discuss his treatment of his subject for the reason that it seems to me so admirable throughout. I will merely mention that there are several respects in which Mr. Levi's book seems to me a more valuable aid to the student of Hobbes than either of the excellent monographs of Croom Robertson or Tönnies, good as they are. It has the advantage of being roughly double the length of either and being devoted exclusively to the philosophy of Hobbes, whereas both Croom Robertson and Tönnies had to give considerable space to their accounts of the philosopher's life and numerous and entertaining controversies. A consequence of this largeness of scale is that Mr. Levi has not to compress his account of Hobbes's theories of method and of physical nature unduly, and is also free to discuss the problem of the tacit metaphysical presuppositions of the *Malmesburiensis* at proper length. This enables him to give us an account of the thought of Hobbes in which the general philosophy is not overshadowed, as has too often happened in the past, by the political doctrine and its application to the practical issues which were to the front in Hobbes's lifetime. Too often Hobbes is treated first and foremost as a political thinker bent on the vindication of absolutism, and his logic and theory of nature as though they were merely a sort of irrelevant introduction to the doctrine of the omnipotent Leviathan. Mr. Levi makes it perhaps clearer than any of his precursors that Hobbes's interest in the *scibile* as *scibile* is perfectly genuine and wholly independent of his social and political theory. He is emphatically not a politician who has, by some accident, drifted into general philosophy, but a philosopher, whose circumstances have given him a special interest in social questions. This is made clear by a very careful study of the whole of Hobbes's work, including the very recently published early MS. printed by Tönnies in the second edition of the *Elements of Law*, which shows us Hobbes at a time before the conviction of motion as the one universal fact had led him to reject the "sensible species" of the scholastics. One of the great merits of Mr. Levi's book is its very thorough documentation; as in the case of Bacon, he has evidently made himself master of the *opera omnia* of his author before writing, and is exceptionally careful to give 'chapter and verse' for all his judgements. Needless to say, the bad old mistake of imagining Hobbes to be an "empiricist," instead of what he actually is, an extravagantly *a-priorist* thinker and ultra-rationalist, vanishes under such an enquiry. It has always been understood in this country that Croom Robertson and Tönnies are indispensable to the serious student of Hobbes; I think that one may now say that Mr. Levi's monograph adds a third to the list of such a student's necessary *subsidia*. I would add that the student has no reason to complain of an additional burden; Mr. Levi's literary style has a straightforward lucidity which makes it a keen enjoyment to follow him.

There is, I think, only one omission which prevents Mr. Levi's monograph from being absolutely complete as a study of Hobbes; it contains no account of his amusingly wrong-headed geometry. This, of course, may fairly be said to have nothing very much to do with the "philosophy of Thomas Hobbes," but it is interesting in itself and has never received quite all the attention it might be worth while to give it. Anyone with sufficient interest in the subject might find very good material for a doctoral thesis in a study of Hobbes's attempts to shine as a mathematician and Wallis's searching exposures of them. To be sure, the material is hard to come by. Hobbes tried to cover up his traces by mutilating his unlucky mathematical works when he collected them, and the Molesworth

edition of his *Works* only reproduces them in the mutilated form ; Wallis's *brochures* also seem now to be exceedingly rare. Still the material is there, and it would be well worth while to make the most of it. It was not to the purpose of Croom Robertson or Tönnies to make a detailed study, *e.g.* of Hobbes's various attempts to "square the circle," nor is it to Mr. Levi's purpose to take any notice of them. But an excellent dissertation might be made about them, and it is a pity some one does not write it. Anyone who will do it will find that there is a good deal of fun to be got incidentally out of the mutual courtesies of Thomas Hobbes of Malmesbury and the Rev. John Wallis, D.D.

A. E. TAYLOR.

Hegel's Science of Logic. Translated by W. H. JOHNSTON, B.A., and L. G. STRUTHERS, M.A., with an introductory preface by Viscount HALDANE of Cloan. Two vols. Vol. I. Pp. 404. Vol. II. Pp. 486. Allen & Unwin. 32s.

This translation of Hegel's *Greater Logic* fills a gap which was somewhat discreditable to the enterprise of English publishers and the earnestness of English students of philosophy. If Hegel be a great philosopher (and several generations of Englishmen were brought up to godliness and good learning on the conviction that he was) then the *Greater Logic* is one of the world's philosophical classics. And, if so, there ought certainly to be a good English version of it. Moreover, whilst the meaning and the merits of Hegelianism may fairly be questioned, there can be no doubt of its immense and persistent influence both on speculation and on practice. The two new forms of state organisation which have been established by revolution since the war, *viz.*, Bolshevism and Fascism, are both lineal descendants of Hegelianism. It is therefore most important that Englishmen should have the opportunity to study the *Logic*, which is the basis of Hegel's system, in their own tongue. Yet this is the first English translation of this work that has ever been published. The editor tells us that there exists in manuscript a translation made in the middle of last century by Brockmeyer, a German-American who became Governor of Missouri. It seems likely that this will eventually be published ; but, at present, this work by Messrs. Struthers and Johnston holds the field.

The present translation was begun by the late Miss Constance Jones, who had completed about fifty pages of it. It has been continued and completed by two former pupils of the late Dr. McTaggart, who acknowledge the help and encouragement which they received from him from the beginning of their work till his lamented death. The translation has been made from the German edition published by Dr. Georg Lasson of Berlin in 1923. Certain biographical notes which appear in this addition have been translated and appended to the text. The translators have also received help from Dr. Lasson over obscure points in the text. A useful German-English and English-German glossary of technical terms is prefixed to the translation, and a list of some important English books on Hegel's *Logic* is appended. Viscount Haldane contributes a characteristic preface, in which, after expressing a favourable opinion of the work of the translators, he explains what he supposes Hegel to have meant and why he thinks that Hegelianism is of permanent importance.

The number of English Hegelians who are both able and willing to pay for their pleasures is apparently very small, and the publication has been made profitable only by the help of Trinity College, Cambridge, and certain other benefactors. Since McTaggart's *Commentary to Hegel's Logic* is concerned with the *Greater Logic* rather than with the highly

condensed version which forms part of the *Encyclopædia*, and is familiar to English readers in Wallace's rendering, this translation is a valuable companion to McTaggart's book and is a fitting tribute to his memory.

The plausibility of some of Hegel's arguments appears to depend largely on puns in the German language, and, to this extent, his work must suffer by translation. So far as the present reviewer can judge, the translators have done their work well. Both are competent German scholars, and one at least is a thoroughly sound and well-trained student of philosophy. They have taken immense pains with their work, and have consulted others about those passages in which Hegel deals with technical subjects, such as mathematics and chemistry, in which they are not themselves experts. They will certainly be criticised on points of detail in the translation of a long and very obscure original; for the translation must depend on the interpretation which they place on their author's meaning, and this is often a matter of controversy. But there can be little doubt that they have succeeded in conveying Hegel's general meaning, so far as he has a meaning and so far as it can be conveyed, to any English reader of adequate intelligence and suitable training who chooses to give a reasonable amount of time and attention to the subject. They deserve the gratitude of English students of philosophy for undertaking and completing a useful, laborious, and rather thankless task.

C. D. BROAD.

La Théorie de la Connaissance chez les Néo-Realistes Anglais. Par R. KREMER. Paris: J. Vrin. 1928. Pp. 204.

This book continues the study of Neo-Realism begun by Prof. Kremer in a work on *Le Néo-Realisme Américain* published in 1920. The term "Neo-Realism" is used in a wide sense to include the views of all those modern philosophers who would usually be called "realists," with or without a qualifying adjective. These theories are "new" in contrast to the scholastic realism from the standpoint of which the book is written. Prof. Kremer has evidently studied very carefully the literature of his subject; he expounds the doctrines of Shadworth Hodgson, and even refers to the writings of S. Laurie. He deals at length with the views of Prof. G. E. Moore, Mr. Bertrand Russell, Prof. Alexander and Prof. Laird, and refers more briefly to Prof. Nunn and Dr. Broad. His exposition is clear and usually accurate; he quotes freely, giving very full references. This book is thus well fitted to fulfil its purpose of making the development of realism in England known to readers on the continent.

Prof. Kremer recognises that the realist movement in this country has its origin in the work of Prof. G. E. Moore. Considerable attention is devoted to the article on "The Refutation of Idealism," which has certainly been of central importance in the reaction against idealism. Prof. Kremer thinks that the strength of modern realism has lain in its criticism of idealism, especially in the insistence upon the reality and importance of relations. He sees clearly the importance of Mr. Russell's emphasis upon method in philosophy, but his complaint that Mr. Russell makes no use of "logistique" in the development and presentation of his philosophical theories shows some misunderstanding of what Russell's "logistique" is. Mathematical logic, as developed in *Principia Mathematica*, is not primarily a calculus but a method of analysis. Both in his *Lowell lectures* and in his *Turner lectures* Mr. Russell employs this method; it is in fact the basis of his philosophical constructions. Prof. Kremer, however, does not take account of the *Analysis of Matter*. This omission perhaps accounts for the criticism that Russell *ought* to be, but is *not*, a neutral monist.

The concluding chapters attempt an estimate of what is true in this "Néo-Realisme". Prof. Kremer appears to think that what is true in it is a re-discovery of doctrines taught by St. Thomas Aquinas. Nevertheless, he does not belittle the services of these modern philosophers in the cause of realism. The chief value of his book lies in the incentive it offers to the study of the authors whom he discusses.

L. S. S.

Psychologie. By H. K. SCHJELDERUP, Professor und Leiter des psychologischen Instituts an der Universität Oslo. Berlin : W. de Gruyter, 1928. Pp. ix, 330. Large 8°. M. 10 ; linen, M. 12.

German students are in almost all things better supplied than we are. This new introduction to psychology amply deserved to be brought from Norway to the soil and speech of Germany. It is comprehensive, well ordered, well informed—the latest German and American contributions are constantly in view—absorbingly interesting in its choice of material and pellucidly clear in the exposition of it. The author shows himself to have teaching gifts of a rare order. It would be interesting to see how these show themselves in the philosophical sphere, in his still more recently published work "*Geschichte der philosophischen Ideen von der Renaissance bis zur Gegenwart.*"

The book is a compilation, the personal element lying in the handling of given material. The author claims that it is the first text-book in which a serious attempt is made to assimilate the findings of psychoanalysis and of behaviourism to the general body of classical psychology. Dr. Pfister, reviewing it in the "*Zeitschrift für psychoanalytische Pädagogik*" accepts this claim unquestioningly. It is certainly not, however the first, for we have already at least two in England, namely, Prof. Beatrice Edgell's able "*Mental Life*" and Dr. Thouless's "*Social Psychology.*" But in any case Prof. Schjelderup's attempt is scarcely successful. To include and insist on the psychoanalytic and behaviouristic principles is not to assimilate them. When Watson is quoted, his narrowly selective observations and widely extended generalisations are reproduced unremedied ; and in respect of psychoanalysis, the theory of it is first laid down as virtually established and the facts, or supposed facts, then explained in terms of it, an *a priori* procedure which is now becoming deplorably common and which is very convenient, since refractory facts can then be committed to the keeping of scientific patience. I say "supposed facts" because the author, following pure psychoanalysts, takes material uncriticised not only from odd tales that cannot be checked but also from the confessions of writers like Rousseau and Stendhal, and does so in the very chapter in which, again like the psychoanalysts, he emphasises the worthlessness of introspection for psychology. Presumably only libertines can speak the truth about their soul. Anyhow, the book shares the current defect of looking at the normal with a continual squint towards the abnormal, "capping" every physiological fact with a pathological one, and straining analogy where direct inspection is both requisite and possible. Normal facts are thus prevented from uttering their own tale ; they consequently fade into insignificance ; and the scientific principle of studying fair samples is perpetually contravened. This absence of independent criticism, and of stringent demand for evidence on the part of material which is to furnish the starting-point of theory, is evident also in the repetition of the common statement (which originated, I believe, with Bernheim, of the Nancy school) that 90 per cent. of ordinary adults can be hypnotised. It is symptomatic of the state of present-day psychology

that loose statements of this sort have become an accepted part of its stock in trade.

The defects of the book, then, are defects of the day rather than personal ones. In despite of them it must be freely acknowledged to be a brave and brilliant attempt to survey, on an elementary level, the wide and confused field of current psychology. The genetic method is followed. Teachers, who will, of course, detect the helpless collocations beneath the seeming syntheses, will find it exceedingly useful for its illustrations and as a model of clear and persuasive discussion.

T. E. JESSOP.

The Social and Political Ideas of some English Thinkers of the Augustan Age. A series of lectures delivered at King's College, London, 1927-1928. Edited by F. J. C. HEARNSHAW, M.A., LL.D. London: Harrap & Co., 1928. Pp. 247. 7s. 6d. net.

This fourth volume of Prof. Hearnshaw's now familiar series differs in some respects from its predecessors. It is confined to English thinkers (Filmer, Halifax, Locke, Jacobites and Non-Jurors, Hoadly, Defoe, Swift and Bolingbroke). And it is for the most part written by historians rather than by philosophers, and in an historical rather than in a philosophical manner. Even for the philosophical reader, however, this is perhaps no great disadvantage. For by the editor's confession the writers with whom it deals are, as thinkers, with the single exception of Locke, 'small fry,' and can consequently only be of interest in their historical context. But as the historical context in question (defined as from 1650 to 1750) is one of great importance for the development of British Institutions, and as they all played their parts in it, even a philosopher can welcome these careful historical studies of their impact upon it. The general principles which underlay their propaganda might no doubt have been more adequately brought out, as has been done for example in the relevant parts of Leslie Stephen's *History of English Thought in the Eighteenth Century* and of Prof. Laski's *Home University Library* volume; but such criticism is really immaterial to the purposes of the work. Perhaps the most interesting individual contributions are the editor's on Bolingbroke, and Mr. G. N. Clark's on the general characteristics of the age. But the essay of most philosophical importance is undoubtedly Mr. J. W. Allen's learned and stimulating rehabilitation of Filmer, who is put forward not only as not in any way deserving the criticisms passed upon him in Locke's first treatise but also as a thinker of much greater profundity and importance than the critic who has effectually prevented us from regarding him as of any importance at all!

O. DE SELINCOURT.

Introduzione alla Filosofia. By F. DE SARLO. Milan: Società Editrice Dante Alighieri. 1928. Pp. 584. Lire 24.

This is a curious introduction to philosophy, so curious that the reviewer does not know what to make of it. Its title is certainly unsuitable, for no beginner could follow it with understanding. It is really an essay in metaphysics, more precisely, perhaps, an outline of the grammar of metaphysics.

Without even the pretence of preliminaries the author plunges into a close analysis of the structure of consciousness, and thence passes on through discussions of the nature and conditions of truth, the character

and metaphysical status of relations, the concepts of physical reality and natural law, historical knowledge and art, to a concluding series of chapters on value. Instead of adopting any of the traditional mappings of the field of philosophy the author starts with what seems to him concrete experience and elicits its problems systematically. The thread he follows is logical, and he follows it with a superb unconcern about what others have said: in the text scarcely a name is ever mentioned, and footnotes are extremely rare. To carry such an independent discussion through nearly six hundred closely printed pages, in a fluent style as limpid as the subject will allow, is a veritable *tour de force*. I am quite at a loss to know whether it is anything else. The author's command of his matter and his quiet dialectical dexterity in dealing with it are irresistibly impressive; but the plane is so abstract, the linguistic fluency so smooth, the discussion so perpetual, so unpunctuated with gathered conclusions, that one is left wondering what it all amounts to. And yet—again—it is an astonishingly able book. Not the least remarkable feature of it is its freedom from the hypnotic influence that certain philosophical ideas and phrases are exercising on many of the author's gifted fellow-countrymen.

T. E. JESSOP.

Received also:—

- L. Klages, *The Science of Character*, trans. by W. H. Johnston, London, G. Allen & Unwin, Ltd., 1929, pp. 308, 10s. 6d.
 W. McDougall, *Modern Materialism and Emergent Evolution*, London, Methuen & Co., Ltd., 1929, pp. xi + 295, 7s. 6d.
 J. Dewey, *Experience and Nature* (New revised edition), London, G. Allen & Unwin, Ltd., 1929, pp. ix + 443, 12s. 6d.
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 A. Faggiotto, *Philosophia Perennis*, Padua, L. Penada, 1929, pp. 21.
 A. Herzberg, *The Psychology of Philosophers*, London, Kegan Paul, 1929, pp. x + 228, 10s. 6d.
 A. Coates, *A Sceptical Examination of British Contemporary Philosophy*, London, Brentano's Ltd., 1929, pp. 256.
 C. Doljan, *Architecture de la Matière*, Paris, F. Alcan, 1928, pp. 198, 18 fr.
 J. H. Coffin, *The Soul Comes Back*, New York, Macmillan Co., 1929, pp. 207, 8s. 6d.
 C. S. Myers, *Psychological Conceptions in other Sciences* (Herbert Spencer Lecture, Oxford, 1929), Oxford, Clarendon Press, 1929, pp. 24, 2s.
 W. Brown, *Science and Personality*, London, H. Milford, 1929, pp. viii + 258, 12s. 6d.
 T. L. Kelley, *Scientific Method*, Columbus, Ohio State University Press, 1929, pp. vii + 195.
 R. Latta and A. Macbeath, *The Elements of Logic*, London, Macmillan & Co., Ltd., 1929, pp. viii + 393, 6s.
 R. Carnap, *Abriß der Logistik*, Vienna, J. Springer, 1929, pp. vi + 114, M. 10.80.
 L. F. Anderson, *Das Logische*, Leipzig, F. Meiner, 1929, pp. 97, M. 3.
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- H. Bergmann, *Der Kampf um das Kausalgesetz in der jüngsten Physik*, Brunswick, F. Vieweg und Sohn, 1929, pp. viii + 78, M. 4.50.
- Électrons et Photons, Rapports et Discussions du 5^{me} Conseil de Physique* (1927), Paris, Gauthier-Villars & Cie, 1928, pp. viii + 289.
- L. F. Anderson, *Die Seele und das Gewissen*, Leipzig, F. Meiner, 1929, pp. 92, M. 3.
- W. T. Stace, *The Meaning of Beauty*, London, Grant Richards and H. Toulmin, 1929, pp. 255, 6s.
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- John Baillie, *The Interpretation of Religion*, Edinburgh, T. & T. Clark, 1929, pp. xv + 477, 14s.
- G. Loria, *Histoire des Sciences Mathématiques dans l'Antiquité Hellénique*, Paris, Gauthier-Villars, 1929, pp. 214, 30 fr.
- Quellen und Studien zur Geschichte der Mathematik, Bd. I., Hft 1*, Berlin, J. Springer, 1929, pp. 112, M. 12.
- S. Demel, *Platons Verhältnis zur Mathematik*, Leipzig, F. Meiner, 1929, pp. v + 146, M. 6.
- P. Mukhopadhyaya, *Introduction to the Vedanta Philosophy*, Calcutta, Book Co., Ltd. (London, Luzac & Co.), 1929, pp. ii + 258 + xxv, 15s.
- M. S. Rau, *The Outlines of Vedanta*, Bangalore, Bangalore Press, pp. xii + 88, Rs. 1.8.
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- J. Stern, *Indische und Europäische Rechtsauffassung*, Berlin, Philo Verlag, 1929, pp. 24, M. 1.50.
- C. C. J. Webb, *Ioannis Saresberiensis Episcopi Carnotensis Metalogicon, Libri IIII*, Oxford, Clarendon Press, 1929, 20s.
- A. Schinz, *La Pensée de Jean-Jacques Rousseau*, Paris, F. Alcan, 1929, pp. xii + 521, 60 fr.
- J. Wahl, *Le Malheur de la Conscience dans la Philosophie de Hegel*, Paris, Editions Rieder, 1929, pp. 264, 40 fr.
- M. Uta, *La Théorie du Savoir dans la Philosophie d'Auguste Comte*, Paris, F. Alcan, 1928, 30 fr.
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- G. F. Stout, *A Manual of Psychology*, 4th edition, revised, in collaboration with the Author, by C. A. Mace, London, W. B. Clive, pp. xix + 680, 12s. 6d.
- F. Wood Jones and S. D. Porteus, *The Matrix of the Mind*, London, E. Arnold & Co., 1929, pp. viii + 424, 21s.
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- C. E. Maylan, *Freuds Tragischer Complex*, Munich, E. Reinhardt, 1929, pp. 215, M. 7.80.
- J. R. Lord, ed. by, *Contributions to Psychiatry Neurology and Sociology dedicated to the late Sir F. Mott*, London, H. K. Lewis & Co., Ltd., 1929, pp. xii + 401, 21s.

- H. P. Newsholme, *Health, Disease and Integration*, London, G. Allen & Unwin, Ltd., 1929, pp. 327, 12s. 6d.
- G. Langfeldt, *En oversikt over den kliniske undersøkelse av det viscerale nervesystem*, Bergen, J. W. Eides, 1929, pp. 134.
- R. Mannier, *Introduction à la Sociologie*, Paris, F. Alcan, 1929, pp. viii + 112, 10 fr.
- G. Stieler, *Person und Masse*, Leipzig, F. Meiner, 1929, pp. 239, M. 13.
- W. Frässdorf, *Die psychologischen Anschauungen J. J. Rousseaus*, Langensalza, H. Beyer und Söhne, 1929, pp. viii + 248, M. 6.60.
- A. Welkisch, *Exper.-vergl. Untersuchungen über die sittliche Bildung in den verschiedenen Volksschulformen*, Langensalza, H. Beyer und Söhne, 1929, pp. 93, M. 2.70.
- C. L. Hull, *Aptitude Testing*, London, G. G. Harrap & Co., Ltd., pp. xiv + 535, 8s. 6d.
- E. Wexberg, *Individual Psychological Treatment*, trans. by A. Eiloart, London, C. W. Daniel Co., 1929, pp. 160, 6s.
- H. Price, *Short-Title Catalogue of Works on Psychical Research, etc., from c. 1450 A.D. to 1929 A.D., Vol. I., Pt. II.*, London, National Laboratory of Psychical Research, 1929, pp. 67-422, 15s.
- G. M. Katsainos, *The Physiology of Love*, Boston, Mass., Privately Printed, 1929, pp. 326.
- L. Rougier, *La mystique démocratique*, Paris, E. Flammarion, 1929, pp. 280, 12 fr.
- J. L. Fischer, *Über die Zukunft der Europäischen Kultur*, Munich, Drei Masken Verlag, 1929, pp. 117.
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- Kadmi-Cohen, *Nomades: Essai sur l'âme juive*, Paris, F. Alcan, 1929, pp. xii + 221, 12 fr.
- G. W. Knight, *Myth and Miracle: an Essay on the Mystic Symbolism of Shakespeare*, London, E. J. Burrow & Co., Ltd., 1929, pp. 32.
- T. Taig, *Rhythm and Metre*, Cardiff, University of Wales Press Board, 1929, pp. 140, 5s.
- E. Benes, *Souvenirs de Guerre et de Révolution (1914-1918), II.*, Paris, E. Leroux, 1929, pp. 607, 60 fr.
- N. Nieuwland and M. Tschoffen, *The Legend of the "Francs-Tireurs" of Dinant*, trans. by E. L. Thompson, Gembloux (Belgium), J. Duculot, 1929, pp. 92.

VIII—PHILOSOPHICAL PERIODICALS.

JOURNAL OF PHILOSOPHY. xxv. [1928], 26. O. O. Norris. 'A Behaviourist Account of Intelligence.' [The four factors to be considered are stimulus-patterns, reaction-structures, reaction-patterns and intelligence itself. Intelligence is picking or choosing between situations or stimuli, by picking or choosing between their meanings. It implies memory, and so "to behave intelligently is to behave adaptively in the light of previous experience". The accumulation of memories is affected by motivation and prevision of consequences. Perception is a three-step process involving (1) "an already active background of tension," (2) isolating a stimulus-pattern, (3) a selection of meanings, "operational rather than verbal". "An 'idea' is a meaning . . . We do not 'have' ideas, we execute or perform them."]

xxvi. [1929], 1. H. L. Friess. 'Wilhelm Dilthey. A Review of His Collected Works as an Introduction to a Phase of Contemporary German Philosophy.' [Concludes that Dilthey insisted that "philosophies are to be considered in their cultural bearings rather than as independent systems of ideas".] xxvi, 2. O. O. Norris. 'A Behaviourist Account of Consciousness, I. The Awareness Aspect of it.' ["Genetically knowing consists in explicitly reacting to stimuli . . . the chief reactions constituting consciousness are those of the language and speech-apparatus." Finds "no place for a conception of consciousness as consisting of sensations, sensa, qualia, data or essences occurring at synapses of the cortex. . . . Consciousness is constituted of acts, not of sensations or qualities". . . . It "thus has efficacy. In ultimate analysis it is as physical as any other kind of act or existence".] F. C. S. Schiller. 'The End of a Great Legend.' [Reply to D. S. Miller in xxv., 13, ending the discussion about James's conception of the Will to Believe. "It is now as clear as daylight that the whole core, basis, ground, reason and justification of his polemic against James was an opinion he held (but never until now explicitly avowed) about the 'usual' meaning of the word 'belief'. According to Prof. Miller, the unpardonable sin of James's doctrine consists in its appealing to experience in order to bear out a will to believe. For 'belief' is so absolute and final in its nature that it rules out all appeal to experience. . . . Thus 'the will to believe' is one thing and 'the will to adopt and test hypotheses' is another. . . . Whoever therefore attempts to verify empirically what he is willing to believe simply contradicts himself." Schiller then points out that this is not the 'usual' sense of the very ambiguous word 'belief,' and was certainly not James's sense; concludes that it is a great pity that Miller did not explain himself thirty years ago because "it would have been such a relief to learn that the unspeakable depravity of the Will to Believe consisted merely in a refusal to adopt Prof. Miller's opinion as to a technical sense to be given to the word 'belief'!"] xxvi, 3. O. O. Norris. 'A Behaviourist Account of Consciousness, II. Its Qualitative Aspect.' ["Psychological quality is a statistical kindness or groupness which we have unwittingly tried to abstract from things or events as a sort of self-existent, constitutive

entity," and "the something of which quality is an 'aspect' is a natural fact . . . as objective as any other". "The actual psychological stimulus is not the stimulus agency alone but a co-operative event . . . an integration of 'stimulus' and receptor behaviour, such as will initiate or release a nervous current." Moreover, "the smiting of light or sound waves upon inorganic surfaces generates events just as truly".] Contains also a long review of Brunschvicg's *Progrès de la Conscience* by A. G. A. Balz. xxvi, 4. **S. Hook.** 'What is Dialectic? I.' [Acute criticism of Adler's *Dialectic*, Bogoslovsky's *Technique of Controversy*, and Jonas Cohn's *Theorie der Dialektik*.] **O. Emil.** 'The Missing Link in Human Understanding.' [Concludes "we do not deny the existence of matter. We suppose from experience that it *is*, although it may not be as we think. Nor can we deny the existence of consciousness, although it may not be as we think; we *must* suppose it *because* it agrees with experience, and is of greater fundamental importance than matter . . . both are useful only to the extent they fit in figuring the facts".] xxvi, 5. **S. Hook.** 'What is Dialectic? II.' [A brilliant paper which it would spoil to abstract. It is written "as a statement of the naturalistic position" by a follower of Dewey.] **R. M. Blake.** 'Report of the Annual Meeting of the Eastern Division of the American Philosophical Association.' [At Philadelphia, Christmas, 1928]. xxvi, 6. **H. G. Townsend.** 'A Persistent Motive for Social Organization.' [Apparently by an adherent of General Smuts's 'holism,' who argues that "the persistent motive for social organization is general impulse toward wholeness," and that "this impulse is no existential psychic phenomenon but rather an involuted process marked by implication and coherence and strongly resembling a logical process". Prof. Lalande may be shocked to hear that "he had swept the heavens with his telescope and found no god," but can proffer the excuse that, unlike Laplace, he was not an expert in astronomy!] **J. R. Kantor.** 'Language as Behaviour and as Symbolism.' [Attempts "a separation of symbolism and language". Symbolism implies a relation between two things, the signifier and the significant and this relation may also be traced in language. It applies best when words are regarded as objects or marks on paper. But "there is no justification for calling true linguistic reactions symbols". For "language is behaviour . . . to speak is to adapt oneself to a situation" and "not essentially the setting up of symbols". "Those who symbolize language isolate words, the dead fruits of speech." This is shown both from the standpoint of the speaker and of the hearer.] xxvi, 7. **E. Nagel.** 'Nature and Convention.' [A sound essay on scientific method which emphasizes "the obvious fact that the universe can be approached only piecemeal," that "conventions for something are conventions for someone," that definitions are hypotheses which form guiding principles and "cannot be overthrown by any crucial experiment," that "the presence of conventional elements does not vitiate the procedure of science, at least on any theory which recognizes that one may have valid knowledge without knowing everything," and that "to maintain that physics knows nothing of the world but pointer-readings" rests on "an untenable separation of theory from its application".] **H. B. Smith.** 'Meaning.' [Shows by illustrations that even obviously nonsensical propositions may acquire meaning in a suitable context, and lays down the principles that "a meaningful statement is one that is either true or false, and a meaningless statement is one that is neither true nor false," that "an assertion is meaningful in proportion as the question of its truth or falsity can be made an issue either of experience or reflection," and that "a judgment of fact which can receive no experimental confirmation is neither true nor false because it is meaningless".] **C. J. Herrick.** 'The Limitations of Science.' [Criticizes R. S. Lillie's paper in xxv, 22 on

'The Scientific View of Life' for assuming that "the individual as such is not the subject of science," by pointing out that isolated phenomena do not in fact occur, and declares "I claim the same right for the psychologist to study a sentiment or a value scientifically as I claim for the physicist to study an electron scientifically". Moreover, the psychologist has an advantage over the physicist. "He has an immediate awareness of the experience which he can repeat and compare in retrospect," while the physicist "can never hope to remember having been an electron".] xxvi, 8. **W. H. Sheldon.** 'Necessary Truths and the Necessary Being.' [A Symposium Paper to answer the question *Are there any necessary truths?* Necessary truths are taken to mean "propositions explicitly affirmed of reality which would be true in any conceivable and consistent universe". This becomes "the problem of necessary being". As claimants to this status, the Laws of Thought may be dismissed, as merely formal; but "it is nothing less than the first duty of all who respect reason to show why being must be". Now "in the beginning all possibles are real" and "nothing itself, a well-defined concept, is as real as anything else". This means that "reality must be originally the domain of absolute chance; chance in the positive sense that all possibles are realized with equal frequency". It follows that "the only rational world is a world of absolute chance". Chance, however, does not mean that "anything may happen" but "the equal opportunity of all possibles". But "if every possible must be, is it not absolutely necessary?" Thus "in the beginning the universe is infinitely richer than that assemblage which we now call the real world". In it "something, nothing, anything and everything must be . . . it is equally the domain of absolute necessity and absolute chance". In this universe there must sooner or later arise a being who is both himself and yet identifies himself with others, like a person; for such a being is possible and "all possibles are real". Let him identify himself with all beings and he becomes all-inclusive, in a word, God. He can then be shown to be one, omnipotent, indestructible, conscious, good and creative, by similar reasoning.] **M. S. Harris.** 'Two Postulates of Expressionism.' ["That the surface aspects of things in no way reveal their essential nature," and that "the main thing is the expression of subjective emotion".] xxvi, 9. **D. C. Macintosh.** 'The Next Step in the Epistemological Dialectic.' [After some brief but caustic criticism of current theories, develops a "critical natural realism" which recognizes "the creativity of life and mind in a realistic universe" and claims to find a place for "such facts as those of colour-blindness, illusion and hallucination".] **P. E. Wheelwright.** 'Toward a Metaphysic of Literary Criticism.' [Leaves the meaning of its 'metaphysic' obscure, but demands for it "a technique no less adequate to its proper function than the technique of the scientist".]

REVUE NÉO-SCOLASTIQUE DE PHILOSOPHIE. xxxi^e Année. Deuxième série, no. 21, Fév., 1929. **M. De Wulf.** *Écoles et renaissances en philosophie.* [Though history can never be a science, in the strict sense, because historical events do not repeat themselves, it is not mere narration. In the history of philosophy, as in other branches of history, the comparative method is indispensable. There really are philosophical schools with a genuine community of principle and method; hence the occurrence of real revivals, in which a neglected principle or method receives new applications, as in the case of neo-Kantianism or neo-Thomism. There are definite outstanding "antinomies" in philosophy and definite attitudes to these "antinomies" *en bloc*; hence the possibility of *philosophiae perennes*.] **J. Maréchal, S.J.** *Au seuil de la métaphysique :*

Abstraction ou intuition. [To say that "Socrates is sitting" is to assert a contingent fact, but the assertion implies that "Socrates sitting" is an eternal and necessary possibility; the realm of such possibilities presupposes, as its foundation, the absolutely necessary being in which *esse* and *essentia* are identical. Neo-Kantianism (e.g. in Cassirer) tries to dispense with this foundation for its realm of essences, but does so at the cost of sacrificing the objectivity of the apparent "necessities" of science. Without the appeal to the "absolutely absolute" being, it is impossible to obtain universal concepts with "necessary" properties by legitimate abstraction. To consider an object from the point of view in respect of which it is absolute is to consider the presence in it of the *ens qua ens*, i.e. to "see God through the object." The causal reasoning by which we argue from experienced objects to God must be an exposition of the internal necessity of the objects themselves, or it will be open to the objection that an infinite cause cannot be inferred from a finite sum of finite effects. An object is only invested with the character of a *noumenon* by an implied relation to the "absolutely absolute being"; this furnishes us with a starting-point for metaphysics. We have then to ask how the metaphysical and necessary and the factual and contingent are combined in human knowledge. A subsequent article will defend the view that in knowledge we have a synthesis of a non-intuitive *à priori* with a "pure given."'] **N. Balthasar.** *La philosophie moderne exposée et critiquée par l'intellectualisme intégral de M. Decoster.* [A summary of Decoster's criticism of the defects of modern philosophy from Descartes to Bergson, followed by some brief and incisive objections to Decoster's own "integral intellectualism". The writer of this notice regrets that from want of acquaintance with the work of Decoster, he finds himself precluded from attempting a précis of this very difficult essay. But if "integral intellectualism" makes it its boast that it reserves no place whatever for facts," he would agree with M. Balthasar that it has signed its own death warrant.] **H. MacDonagh.** *La notion d'être dans la métaphysique de Jean Duns Scot (cont.).* [Discusses the arguments offered by Scotus for the doctrine of the "univocity of being," contending that they show complete inability to understand the meaning of "analogy of proportionality."'] **R. Kremer.** *Bulletin d'épistémologie.* Reviews, etc.

ANNALEN DER PHILOSOPHIE. Band vii., Heft 9 and 10, Feb., 1929.
A. Seiffert. *Ueber die Beziehungen zwischen Erlebnis und Begriff.* [The concept, though irreducible to sensation, is not an independent element of knowledge, a purely rational object: it is inseparably connected with data, with immediate experience.] **E. Barthel.** *Freiheit und Prädestination.* [Even physical nature cannot be wholly unfree, for otherwise it would never have developed out of chaos into a system and brought forth life and mind. Freedom is the ground of Becoming. Yet there is equally predestination. That the future is not really indeterminate is proved by its obvious determinedness when it has become the past. The uncertainty of the future, which can exist only in finite minds, is a condition of the effort of creative freedom, the device by which this protects its efficiency. An accident is "an event whose cause, so far as this is treated as one, has a significance infinitely smaller than that of the event itself."'] **W. Dieck.** *Ueber den Begriff der negativen Zahlen.* [Contradicts the conclusion of Stammer in Heft 4 and 5 (see MIND, Oct., 1928) that a rational definition can be given of negative numbers.] **M. Wiskemann.** *Bemerkungen über Raum und Zeit.* **A. Herzberg.** *Möglichkeitssagen betreffend den Satz vom ausgeschlossenen Dritten, Kausalität und Telepathie.* [Reply to Petzoldt's denial in Heft vi. (see MIND, Jan. 1929) that telepathy is even a possibility.] Reviews.

KANT-STUDIEN. Band xxxiii, Heft 3-4, 1928. **Paul Menzer.** *Erich Adickes.* [Obituary notice, with portrait, of the great Kantian scholar.] **K. Riezler.** *Die physikalische Kausalität und der Wirklichkeitsbegriff.* [The newest physics is finding firstly that causal laws are statistical rather than absolute, and secondly that physical phenomena seem to be determined as much by the end as by the beginning. These two revolutionary changes in the concept of causality require a change in the physical concept of reality, a change that provides a warrant, or at least leaves room, for an idealistic philosophy. For the revised notion of causality appears to allow of only two interpretations: either it is pure chance, in which case the faith and methods of science must be abandoned, or else it is the qualitative uniformity—the unity of freedom and law, the finalism—that we know to be characteristic of spirit. On this latter view spirit, with its "ought," its liberty to submit to an inner necessity, is no longer left in perplexing disconnection with the world of physical phenomena.] **H. Bergmann.** *Über einige philosophische Argumente gegen die Relativitätstheorie.* [The paper is at cross-purposes with the objections, for these aim chiefly at showing that the theory cannot be construed metaphysically, and this is equally maintained, from the Kantian standpoint, by the author. In effect his contention is that the supposed difficulties of the theory arise from considerations that fall outside the narrow and abstract sphere that physics has marked out for itself.] **K. Bühler.** *Die Symbolik der Sprache.* **P. Häberlin.** *Das ästhetische und das moralische Leben.* [The moral life is the sphere of unrest, of interrogations, of ends to be striven after and of laws to be obeyed, and it is an illusion to suppose that the unrest can be morally stilled. The æsthetic life is pure receptivity, pure enjoyment of life: what is so enjoyed is accepted without asking after its reality or unreality, indeed the very opposition of subject and object is absent. Hence, were our receptivity totally free from moral and logical influence, everything would be beautiful to us; and for the same reason an Æsthetic, in the sense of a body of laws defining the properties an object must have in order to be considered beautiful, is absurd. In its simple, unquestioning and untroubled acceptance of life, the æsthetic attitude is the analogue and premonition of religious faith.] **L. Goldstein.** *Kants Sommerfrische.* [Account, with photograph, of a cottage recently restored and set apart as a memorial, in which Kant used to spend part of his summer.] **Reviews.** Communications (including *Zum 100 Geburtstag Friedrich Albert Lange*, by K. Vorländer).

IX.—NOTES.

OPERA HACTENUS INEDITA ROGERI BACONI.

TO THE EDITOR OF "MIND".

SIR,

I find it a little difficult to characterise adequately the temerity of Prof. A. E. Taylor's intuitive excursions into palaeography. Anyone who thinks that the contraction for *cum* is *cm* and for *tamen* is *tm* is surely debarred from writing on the matter at all. Whatever *cm* may stand for—and palaeography is full of snags—one thing it never means is *cum*, and though *tm* stood for *tamen* up to the ninth century, after the change of hand it is restricted to *tantum*. No wonder he finds 150 mistakes in Fr. Delorme's text. It is, perhaps, a little unusual for one who has never edited a mediæval text from the manuscripts to put on paper a suggestion that a scholar who has devoted his whole life to the publication of thirteenth and fourteenth century texts—many of them for the first time—cannot read a manuscript, and to tell us what that manuscript, which the critic has never seen, contains. I have compared each of Prof. Taylor's suggestions with the original. The following is the result. 113.34 'esse divini' is written in full. 126.36—wrong reference; if 122.36 is meant 'cum' is written in full. 144.8 'et in .c.i in / mobili' (the italics show expanded contractions). 215.9 'et sic' in manuscript (see note). 71.29 'naturalibus' in manuscript. 79.16 'a motu' is written in full, and is obviously right. 215.12 wrong reference. 150.29 'confortius' in manuscript (the *f* is plain). 14.31 'circulus' in manuscript. 249.16 'supericra' in manuscript.

Since this is not the first time that Prof. Taylor has commented, equally rashly, on the text of these fascicules, may I be allowed to inform him that "edidit" is not the Latin for "critically edited," for which there is a well-known formula. The object of this publication is to let students know what is in the manuscript. Fr. Delorme and I, with the kind assistance of some distinguished scholars, have spared no pains to this end, and we welcome any criticism that will help to elucidate the mind of Bacon.

ROBERT STEELE.

Savage Club, W.C.

SIR,

I am anxious to acknowledge and express my regret for an error into which I have fallen in a notice of *Opera Rogeri Baconi hactenus inedita: Fasc. VIII.* in MIND No. 150. I owe to Dr. C. Singer, F.R.S., to whom I hereby express my thanks, the information that I was wrong in supposing that the *cum* which I described as a mistake for *tamen* at

126.36 of the work, and the impossible *esse divini* at 113.34 have got into the printed text by faulty expansion of contractions. The words, as Dr. Singer assures me, are written in full by the scribe. I also learn from Dr. Singer that the error *circulus* for *circulos* at 14.31 is that of the scribe of the MS. I ought, of course, to have called attention only to the erroneous-ness of the text without rashly making suggestions about the sources of error, which should be left to the practised palaeographer. I am sorry that by making such a conjecture I have by implication done some injustice to the efficiency of Fr. Delorme as a transcriber. For this I desire frankly to ask Fr. Delorme's forgiveness. It must be understood that I retract nothing I have said about the editing of the volume. To print a transcription of a faulty MS. is not, in my judgement, an adequate "publication" of the material it contains.

A. E. TAYLOR.

Mr. Steele confuses the questions at issue. In some, not all, of the passages he produces I believed that there might probably be some uncertainty about the MS. reading, and I have already, on better information, withdrawn the suggestion in these cases. What I still maintain is that the readings to which I take objection are errors which the editor—i.e. publisher—of a work of R. Bacon should have detected and corrected, as he has avowedly done with other scribal errors.

I beg therefore to repeat the following statements: 113.34 *esse divini* is unmeaning. The statement Bacon is making is that certain 'appetites' for one another have been implanted in 'matter' and 'form' respectively by the Creator *propter continuationem*—with a view to the continuousness of—something. To say that God has endowed matter and form with a reciprocal appetite for one another with a view to the continuity of *His own* being is obviously senseless, and it was not 'temerarious' to add that the true reading should be *essendi*. 122.36 *cum* again is certainly wrong, since the words *quandoque cum raro fiunt raritate temporis* would be ungrammatical. The alternatives are to write *cum* *quandoque fiant* or to amend *cum* to *tamen*, the meaning being "though," or "yet, they sometimes happen etc." 150.29. I have never denied that *confortius* is in the Amiens MS. I say that it is meaningless. *Confertius* "more compact" might yield the sense required, but I suggested *co(a)r(ta)tius* by preference, because *coartatus* is a word used in the sense demanded by Bacon in this treatise, whereas *confertus* is not. 249.16 *superiora* cannot be correct though it is in the MS. The full phrase is *motus solis in suo proprio circulo, scilicet xii* (MS. *superiora*). A genitive is necessary to the sense, "the motion of the sun in his proper circle, viz., that of the twelve (signs of the Zodiac)". I acknowledge readily that I should perhaps have proposed the correction *superiorum* rather than *signorum*. But my suggestion of the latter word was not 'temerarious'. It was based on the *in signis*, etc., of this same passage, a little lower down (249.21). 14.31 *circulus* again is the scribe's obvious error for *circulos* as is manifest to anyone who reads the passage with the least attention to its meaning and grammar, as I showed by actually translating and explaining the sentence. 215.9 *et si* should be printed as one word, since the meaning is 'neither fire nor earth, even though there were a vacuum between them, will move, but will remain in their proper places.' If *et si* be taken to mean "and if" the sentence becomes untranslatable. (Of course, I do not think this a bad mistake, and should not have mentioned it at all if the printed text did not habitually distinguish elsewhere between *et si* and *etsi*. I of course recognize that the editor was right in changing the *sic* of the MS. to *si*). 71.29. The printed words

are unde universalia finita et in numero definito, c. 5, set naturalibus non set infinita quoad nos. This is unmeaning, but becomes sense and grammar when we write *naturalia*, as ought to have been done. 79.16. It is here said that motion (*motus*) has its *esse a motu*, its *essentia a motore*. I leave it to anyone who knows anything of the thirteenth century philosophies to judge whether *motu* here is not, as I asserted, a mere error for *moto*. It is the thing moved from which the movement has its *esse*, because *motus* is *actus mobilis* (*ἐντελέχεια τοῦ κινήτου*). 144.8. There is again something obviously wrong with the text. We are told that motion may be *in subjecto* in two ways, of which the first is *tanquam in subjecto suscipiente et radicali*. The text goes on, *et sic color in corpore et in ejusmodi immobili*, "and so colour in body and in an immoveable of that kind." Bacon then goes on to say what the second way in which *motus* is *in subjecto* is. Obviously the end of the first clause should be something like, *et sic color in corpore et ejusmodi (motus) in mobili*. The exact correction may be uncertain, but the sense demands that we should be told that motion is *in mobili tanquam in subjecto suscipiente*. I cannot deal with the two remaining cases in which Mr. Steele merely says that my printed references were wrong. But I think what I have already said fully justifies my general criticism that the printed text of Bacon's *questiones* is far from being what it ought to be. Nor is it ingenuous to offer the defence that the object of the publication is merely to print what is in the Amiens MS., right or wrong. By properly correcting the scribe in scores of cases the editors have deprived themselves of that plea.

I much regret the necessity for this communication. I should have preferred simply to acknowledge my mistake as to the origin of certain impossible readings in the printed text, without adding a superfluous word. Mr. Steele forces my hand by falsely assuming that I declared all the corruptions I specified to have been introduced in transcription, and by indulging in language of contumely which I have now shown to be undeserved. I own to having been apparently deluded about *cm*; the abbreviation of *tamen* I intended was *tn*.

A. E. TAYLOR.

SIR,

I have to thank you for an opportunity of seeing Prof. Taylor's second letter.

I do not confuse the issue, which is simply this. Prof. Taylor, being an incompetent palæographer, has (in addition to criticism of our editorial policy, in making which he was clearly within his rights) charged us with a number of purely palæographical errors, though he had not seen the manuscript—"mistaken expansion of contractions," "wrong grammatical terminations occur, presumably from inaccurate expansion," "nonsense produced by wrong expansion," "a misreading," "perversion of a sentence by the misreading of a single letter". Everyone of these reckless charges has been proved to be—I will not use Prof. Taylor's word—unfounded.

Suum cuique. Prof. Taylor's habit of mind has led him to take other men's work on manuscripts, and to build a text thereon. His task is one of the first importance, and emendations such as those he proposes, properly controlled, are what we expect and hope for from scholars. Our more humble task is to let them know what is in the manuscript. All competent scholars whom we have consulted agree with us that till we have the whole body of Bacon's early teaching before us conjectural emendation would be highly dangerous, especially in view of the *lacunæ* of the sole authority. The falsification of medieval texts is far too common.

With regard to Prof. Taylor's explanation that he intended to write *tn* and was printed *tm* one can only say that in that case his remark was pointless. We note that the same statement occurred in a similar review in another journal.

Readers of "MIND" may be left to judge of my "falsity" and my "language of contumely".

ROBERT STEELE.

Savage Club, W.C.

MISSING "MIND".

If any reader of MIND knows of a purchaseable copy of No. 141 (January, 1927), a subscriber who has lost his would be glad to hear of it through the Editor.